

# WAPA Outreach Process Mountain West

WESTERN AREA POWER ADMINISTRATION



## Comment and Response Summary

Updated: January 10, 2018

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## Overview

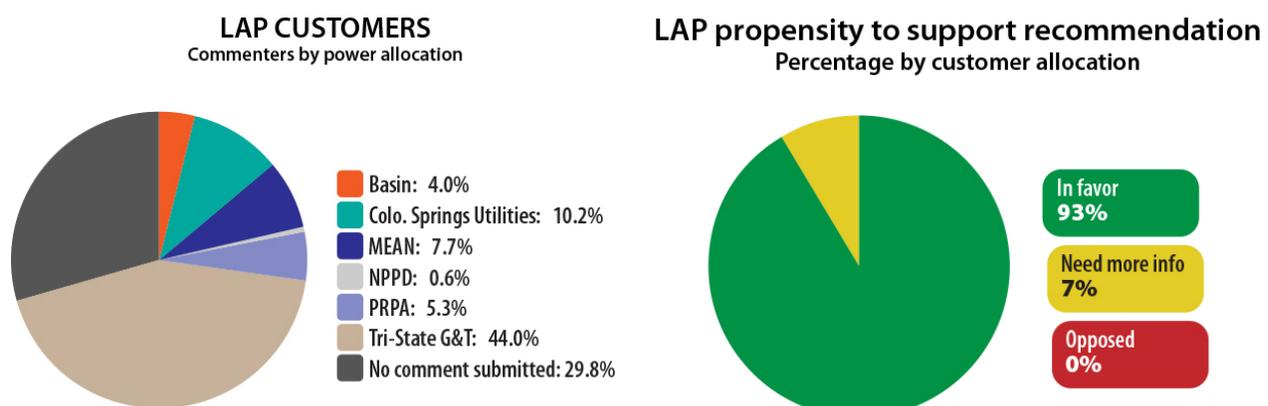
On Oct. 12, 2017, the Western Area Power Administration (WAPA) published a *Federal Register* notice (FRN) with a recommendation to pursue final negotiations with the Southwest Power Pool (SPP) regarding membership of two of its power projects, the Colorado River Storage Project (CRSP) and the Loveland Area Projects (LAP). Although the regulatory requirements WAPA follows for public processes, such as those that apply to ratemaking, do not apply, WAPA engaged in this effort for customer outreach and to obtain stakeholder input. As part of its commitment to an open stakeholder process, WAPA held a 45-day comment period and three information forums to provide customers and other interested parties information about the recommendation and an opportunity to comment.

Input received will help inform a decision about whether or not WAPA will proceed to final negotiations for CRSP and LAP membership in SPP.

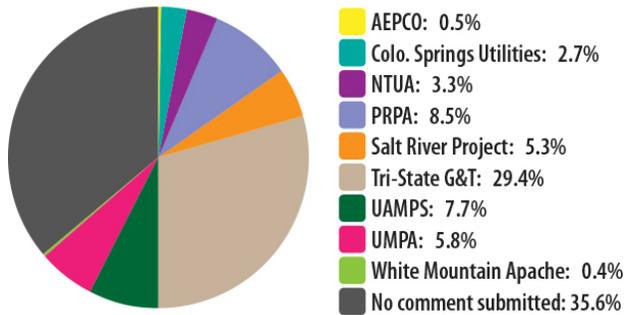
## Executive Summary

WAPA received 15 submissions from interested parties during the comment period. Each submission incorporated several distinct comments. This document addresses the range of customer input by paraphrasing comments and WAPA's responses, alphabetically by commenter. Original comments, as submitted, are posted to the Mountain West Public Process webpage at [www.wapa.gov/About/keytopics/Pages/Mountain-West-process.aspx](http://www.wapa.gov/About/keytopics/Pages/Mountain-West-process.aspx)

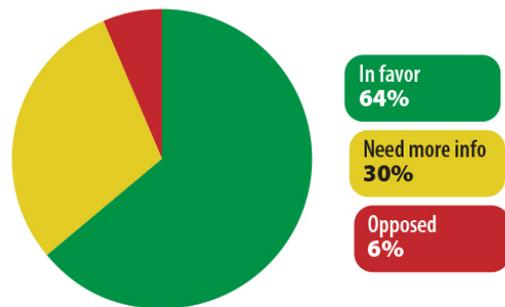
For LAP, comments were received from customers representing about 70 percent of the resource. For CRSP, comments were received from customers representing about 65 percent of the Salt Lake City Area Integrated Projects (SLIP) resource. The following charts provide a generalized breakdown of customer engagement in the outreach effort and propensity to support the recommendation.



**CRSP CUSTOMERS**  
Commenters by SLIP power allocation



**CRSP propensity to support recommendation**  
Percentage by SLIP customer allocation



**NEXT STEPS**

WAPA will use its Recommendation Report and supporting analyses; the questions and answers from the regional forums; and the comments and responses from the stakeholder outreach to inform a decision whether or not to pursue final negotiations with SPP regarding membership for CRSP and LAP. A decision is expected to be made in early 2018. Once a decision is reached, WAPA will post the decision on its Mountain West Public Process webpage at [www.wapa.gov/About/keytopics/Pages/Mountain-West-process.aspx](http://www.wapa.gov/About/keytopics/Pages/Mountain-West-process.aspx)



## Responses to Comments

WAPA received 15 submissions from interested parties during the comment period. Each section represents the entity, or entities, that submitted the various comments and questions within their letters. Comments and questions are segmented alphabetically by commenter, then paraphrased and addressed individually. Original comments, as submitted, are posted to the Mountain West Public Process webpage at

[www.wapa.gov/About/keytopics/Pages/Mountain-West-process.aspx](http://www.wapa.gov/About/keytopics/Pages/Mountain-West-process.aspx)

### Arizona Electric Power Cooperative, Inc. (AEPCO)

**AEPCO 1:** AEPCO recognizes that most utilities will participate in a western regional transmission organization in the future and compliments WAPA for participating in the Mountain West to evaluate options.

**RESPONSE:** WAPA appreciates the commenter's support and believes that proactively evaluating and negotiating options provides the best position to secure an optimal future for its organization and customers both in terms of system reliability and economic performance. WAPA looks forward to continuing engagement with its customers as this process unfolds.

**AEPCO 2:** AEPCO asked if WAPA and the other Mountain West participants have the ability to withdraw from SPP should anticipated benefits or costs vary greatly from what was expected.

**RESPONSE:** WAPA is still in the negotiation phase with Southwest Power Pool. However, under current SPP withdrawal provisions, the main driver of post-implementation withdrawal costs is attributed to cost sharing of regional transmission expansion projects incurred as a member. Similar to what was negotiated by WAPA's Upper Great Plains region when it joined SPP, WAPA's CRSP and LAP are negotiating a federal service exemption that includes exemption from regional transmission expansion costs. This will mitigate exposure to withdrawal costs.

**AEPCO 3:** AEPCO would like to understand further how CRSP will reduce expenses so customers will not bear an \$11 million rate increase when the seven-year mitigation period ends and what mechanism WAPA will use to inform CRSP customers of progress.

**RESPONSE:** WAPA acknowledges the commenter's concern regarding a potential increase in its CRSP rates in the eighth year after the mitigation agreement has ended. For CRSP, cost avoidance has been the primary driver for participation in this effort. WAPA believes markets will continue to form and expand in the West and that bilateral trading partners will dissipate resulting in higher future purchase power costs to meet contractual obligations. This is a fundamental driver for WAPA's proactive and strategic approach to regional transmission organization (RTO) participation.



Although WAPA is currently estimating a cost of approximately \$11 million per year from CRSP market participation, it is difficult to determine actual costs and benefits. If WAPA joins SPP, one- to three-years of market operating experience will provide greater certainty for WAPA to determine the best way to manage actual costs. WAPA anticipates, by year seven, staff will have gained experience on how to maximize the economic benefit of the CRSP resources and congestion management rights. Also, when the mitigation period ends, CRSP will receive a percentage of point-to-point revenue that would have been previously allocated to mitigation requirements. WAPA anticipates these developments will offset the \$11 million per year in costs by the end of the mitigation period.

WAPA will continue to update and engage CRSP customers about its market-related efforts through its annual meetings such as the 10-year plan meetings, annual work plan meetings, and annual CRSP customer meetings. If CRSP is participating in a market, WAPA will communicate market performance to customers during these meetings. CRSP staff will continue to be available to engage with customers and provide individual updates as necessary. In addition, the CRSP firm electric service rate is effective for a five-year period, after which time it must be extended or updated through a formal public process. A public process for this purpose will occur during the mitigation period, which will provide another opportunity for customers to have an in-depth discussion and evaluation of the financial results.

**AEPCO 4:** AEPCO asked how WAPA will ensure that SPP costs specific to a particular project will be kept separated so no subsidization between projects occurs.

**RESPONSE:** WAPA is diligent to ensure that project costs are clearly identified. WAPA markets power from various projects, and those projects are each responsible for their own expenses. Furthermore, the federal service exemption will exempt CRSP firm electric service deliveries from any future expansion or transmission improvement charges imposed by SPP. Any expenses CRSP incurs from SPP will be CRSP-related expenses.

**AEPCO 5:** AEPCO encourages WAPA to negotiate similar provisions of the federal service exemption that were a condition for WAPA's Upper Great Plains region to join Southwest Power Pool. As explained by SPP and WAPA in materials submitted before the Federal Energy Regulatory Commission (FERC), the federal service exemption reflected the conditions upon which WAPA could participate in a regional transmission organization (RTO). Those conditions were set forth in Section 1232 of the Energy Policy Act of 2005, and reflect the legal constraints placed on a power marketing administration's (PMA) participation in an RTO.

**RESPONSE:** Securing a federal service exemption for firm electric service deliveries is a non-negotiable requirement for WAPA's CRSP and LAP to participate in SPP. The federal service exemption includes an exemption from marginal congestion charges and

marginal loss charges associated with firm electric service deliveries along with an exemption from a majority of transmission cost allocation.

**AEPCO 6:** AEPCO encourages WAPA to include a provision in the SPP membership agreement that reflects WAPA's contractual obligation to provide the benefits associated with the CRSP contracts.

**RESPONSE:** WAPA is responsible for the marketing and delivery of federal hydropower to its preference customers at the lowest possible rates consistent with sound business principles. While this responsibility is sufficiently embodied in its CRSP 2025 firm electric service contracts, CRSP will work with SPP to include this in the SPP membership agreement.

**AEPCO 7:** AEPCO wishes to reserve its right to submit additional comments or update previous comments.

**RESPONSE:** With the limitation that certain decisions must be made at certain times, WAPA appreciates customer discussion and involvement to help inform our process. WAPA will continue to provide updates in the future and appreciate active participation from customers.

## Basin Electric Power Cooperative (Basin Electric)

**BASIN 1:** Basin Electric is a longtime WAPA firm electric service customer and interconnected transmission owner. Basin Electric is supportive of WAPA's recommendation for CRSP and LAP to pursue final negotiations for membership in the SPP RTO as a transmission-owning member and as a participant in the SPP Integrated Marketplace; consistent with CRSP's and LAP's respective statutory requirements.

**RESPONSE:** WAPA appreciates the commenter's support as a firm electric service customer and an interconnected transmission owner. WAPA agrees that membership in a regional transmission organization (RTO) must be consistent with CRSP's and LAP's statutory requirements. Therefore, the inclusion of the federal service exemption for LAP and CRSP, which was negotiated by WAPA's Upper Great Plains (UGP) region when it joined Southwest Power Pool in 2015, is a non-negotiable requirement for WAPA to participate in SPP.

**BASIN 2:** Basin Electric supports WAPA's efforts to pursue appropriate federal service exemption requirements for both CRSP and LAP to help mitigate potential negative cost shifts to its firm electric service preference customers, allowing CRSP and LAP to remain focused on the primary objective of delivering firm electric service to the respective preference customers at cost-based rates. The federal service exemption should focus on each project's characteristics and requirements of supporting hydropower deliveries from federal



hydroelectric resources, and to support WAPA's other contractual obligations to its respective customers.

**RESPONSE:** WAPA will require the federal service exemption for both CRSP and LAP as a non-negotiable requirement of SPP membership. The primary aspects of the federal service exemption include an exemption from marginal congestion charges and marginal loss charges, as well as a majority of transmission cost allocation. WAPA appreciates the commenter's support.

**BASIN 3:** Basin Electric supports WAPA's plan to have CRSP and LAP each pursue a membership agreement with Southwest Power Pool's regional transmission organization (RTO) as transmission-owning members and as participants in the SPP Integrated Marketplace.

**RESPONSE:** WAPA appreciates the commenter's support.

## Colorado Springs Utilities (CSU)

**CSU 1:** Colorado Springs Utilities is both a WAPA customer and a transmission-owner participant in the ongoing Mountain West effort. As a general matter, Colorado Springs Utilities explores options it believes will provide value to its citizen-owners. Colorado Springs Utilities, similar to many of its neighboring utilities, anticipates continued evolution of the U.S. electric industry. It is likely the industry's future will involve expansion of a centralized market for energy and ancillary services so as to meet the increased need for wide-area situational awareness and control, as well as access to geographically and operationally diverse generation resources. Thus, Colorado Springs Utilities sees membership in a regional transmission organization (RTO) as one possible outcome worth pursuing with its Board of Directors in fulfilling its objective of providing reliable service, while keeping costs low.

Colorado Springs Utilities supports the pursuit by WAPA's CRSP and LAP of final negotiations with Southwest Power Pool.

**RESPONSE:** WAPA appreciates the commenter's support.

**CSU 2:** Colorado Springs Utilities commented that, as a collective, Mountain West appears to be able to obtain more favorable terms from Southwest Power Pool than if the participants had sought membership individually.

**RESPONSE:** WAPA agrees that the collective negotiations between Mountain West and Southwest Power Pool provide an opportunity for WAPA and the other Mountain West participants to influence terms and shape the kind of market environment desired to ensure WAPA continues to deliver on its core mission and allows the Mountain West participants to optimize the benefits of joining Southwest Power Pool.

**CSU 3:** Colorado Springs Utilities commented that the involvement of CRSP and LAP are critical elements of Colorado Springs Utilities participation in the Mountain West effort, which is reflected in its willingness to participate in the cost shift mitigation agreement ensuring that CRSP's participation will not adversely affect the firm electric service load outside of the Mountain West footprint.

**RESPONSE:** WAPA appreciates that Mountain West participants recognize the importance for WAPA to minimize the financial impact to WAPA's firm electric service customers if WAPA's CRSP and LAP join the Southwest Power Pool. Because there is a potential initial negative cost shift to CRSP firm electric service customers, WAPA appreciates the Mountain West participants', including the public power entities, willingness to mitigate those costs during the initial seven-year mitigation period.

**CSU 4:** Colorado Springs Utilities commented that the use of cost shift mitigation among the Mountain West participants for a seven-year period lessens the risks to firm electric service customers during the transitory period.

**RESPONSE:** WAPA appreciates the support of the Mountain West participants in negotiating mitigation for cost shifts to reduce the risk and minimize the impacts to WAPA's CRSP and LAP firm electric service customers.

**CSU 5:** Colorado Springs Utilities supports the current opportunity with Southwest Power Pool given its member-oriented governance model, its ability to maximize the value of the direct current (DC) ties between the two footprints, and its existing treatment of federal entities through federal service exemption provisions.

**RESPONSE:** WAPA agrees with the commenter's assessment based on qualitative and quantitative factors as outlined in the Recommendation report. Those factors include Southwest Power Pool's governance model, the potential to maximize market efficiency benefits between adjacent markets connected by DC ties, existing federal service exemption provisions, and proven ability to onboard new participants. In addition, four of the Mountain West participants already have transmission assets, generation assets, and load within the SPP footprint in the Eastern Interconnection and are familiar and comfortable working with SPP.

## Irrigation and Electrical Districts Association of Arizona (IEDA)

**IEDA 1:** IEDA commented that the new member communication and integration process document from October 2017 provides that the federal service exemption will apply to all transmission expansion costs eligible for regional cost allocation and provides for "limitation on financial penalties." IEDA is also interested in how customers with firm transmission service or exchange agreements will be impacted. IEDA agrees that the federal service exemption should be applicable to the Salt River Project (SRP) Exchange.

**RESPONSE:** The commenter’s inquiry refers to language in the Southwest Power Pool (SPP) governing documents regarding a limitation on “financial penalties.” The penalties language was inserted into the SPP Governing Documents when WAPA’s Upper Great Plains region joined SPP. Its purpose was to clarify that WAPA would not be subject to any monetary financial penalties associated with any potential claims against it for a violation of North American Electric Reliability Corporation (NERC) reliability standards. The prohibition against assessing monetary penalties against a federal power marketing administration has been upheld in *Southwestern Power Administration v. FERC*, 763 F.3d 27 (D.C. Cir. 2014).

Although WAPA has worked to ensure there will be minimal impact to its firm electric service rate and deliveries, it also understands that there may be changes in transmission costs for customers purchasing transmission. WAPA continues to work to minimize the overall impact to its customers.

Finally, in regard to WAPA’s existing grandfathered and exchange agreements, if the agreement existed before the Open Access Transmission Tariff (OATT) agreement, WAPA anticipates that the agreement will continue to provide the same level of service until its termination date (if applicable). If the agreement is a post-OATT agreement, that service will transition to transmission service under SPP’s OATT.

**IEDA 2:** IEDA stated that the payment of refunds and penalties by WAPA has a complicated history and intersects with various statutory requirements, Federal Energy Regulatory Commission (FERC) jurisdictional issues, as well as the variety and sources of funding and asked what consideration WAPA has given this.

**RESPONSE:** WAPA is still engaged in litigation regarding the California Energy Crisis and is not at liberty to discuss those issues. However, WAPA is working with Southwest Power Pool (SPP) and other SPP Transmission Owners to reach resolution regarding a contractual commitment to repay any refunds owed by WAPA as a result of its participation in SPP. WAPA, individually and through the Department of Energy, have intervened and remain parties in the FERC Docket Nos. EL16-91 and EL18-19 which have been consolidated. WAPA is confident that it will be able to reach a solution within the SPP stakeholder process that protects its interest consistent with federal law. For example, WAPA already has language in the SPP Governing Documents protecting it against violation of the Anti-Deficiency Act. Any commitment by WAPA to make refunds within SPP will also be done consistent with its existing refund obligation under existing federal regulation and would only be prospective in nature.

**IEDA 3:** IEDA commented that it has not been able to determine if this initiative will have significant benefit to CRSP. The situation facing WAPA’s CRSP appears to be much different than the situation WAPA’s Upper Great Plains (UGP) region faced when it joined Southwest Power Pool, specifically in regard to UGP’s loss of trading partners. Further IEDA does not



believe that markets will expand in the near future to the West (especially without CRSP) so CRSP is not in any imminent danger of experiencing a similar loss of trading partners. Therefore, IEDA believes that the basis for WAPA's recommendation to join SPP has not been substantiated.

**RESPONSE:** While WAPA's CRSP is at least initially not estimating significant benefit from participation in a market, WAPA believes that if it were to avoid participation now, at some point in the future it will likely face a situation similar to UGP's loss of trading partners and will be forced to join a market. If WAPA's CRSP is forced to join a market at a later date, it is likely that WAPA's CRSP would not be able to negotiate cost shift mitigation or the federal service exemption.

WAPA is already seeing impacts to its trading opportunities from the expansion of the California Independent System Operator (CAISO) Energy Imbalance Market (EIM) and anticipates this will only be amplified as more entities join markets. As the commenter points out, to-date, the CAISO has not been able to expand its full market due largely to challenges related to governance. However, WAPA believes that market expansion in the Western Interconnection is inevitable.

**IEDA 4:** IEDA expressed concern about the governance of Southwest Power Pool (SPP), its potential interactions with Federal Energy Regulatory Commission (FERC), and how WAPA as a federal entity with specific limitations and express legislative authorization will function within a regional transmission organization (RTO). The commenter is also concerned that a cost shift mitigation agreement has not yet been executed.

**RESPONSE:** WAPA assures the commenter that it is confident in the good faith negotiations it is engaged in with the Mountain West participants and SPP. While a certain amount of FERC litigation is expected with any RTO, WAPA is confident in and pleased with SPP's organizational structure and stakeholder engagement culture through its direct involvement via the Upper Great Plains region. WAPA will require that the cost shift mitigation agreement with other Mountain West participants be fully executed prior to entering into a membership agreement with SPP.

## Municipal Energy Agency of Nebraska (MEAN)

**MEAN 1:** MEAN expressed concern about the impact to WAPA customers after integration and after the seven-year mitigation period. MEAN asked if the calculation for LAP and CRSP network transmission charges will change, or if it will still be billed based on kilowatt net of a customer's WAPA allocation.

**RESPONSE:** As discussed in the forums, upon integration, eliminating pancaked rates has the advantage of eliminating pancaked payments, but has the impact of raising transmission zone rates due to less transmission service being sold. WAPA shares this



concern, but anticipates the overall advantages of a de-pancaked transmission system, including the ability to optimize resources across the footprint, support such a transition.

Regarding conditions after the seven-year mitigation period, LAP's and CRSP's zonal rates are anticipated to have downward rate pressure with the increase of point-to-point revenue credits (that will have been used for mitigation payments for the first seven years). However, when the mitigation period ends, WAPA's CRSP will no longer receive these mitigation payments. Whether CRSP's costs post-mitigation will be higher or lower compared to CRSP's costs if it did not join SPP is very difficult to estimate with any degree of certainty.

As a transmission owning member of Southwest Power Pool, WAPA would continue to cover transmission service costs across each of its project's transmission systems as part of its bundled product, as is done today. WAPA would be responsible for the transmission service for these "partial loads" and each customer would be responsible for the transmission service beyond what WAPA covers, just as is done today.

**MEAN 2:** MEAN commented that LAP customers should not be harmed because of firm electric service allocations for customers located in Southwest Power Pool's (SPP) footprint in the Eastern Interconnection. The commenter asked how the zonal construct will be handled.

**RESPONSE:** WAPA does not estimate a LAP firm electric service rate impact will occur from joining SPP, and therefore customers should not see a negative impact related to their firm electric service allocations. WAPA is exploring the possibility of changing displacement arrangements used for serving LAP load in the Eastern Interconnection, but joining SPP does not require changes to those arrangements.

Regarding the zonal construct, WAPA's LAP transmission system (like today, both the Eastern Interconnection and Western Interconnection facilities) would be joined into a joint zone arrangement with Cheyenne Light, Fuel and Power's transmission system. The Sidney Direct Current (DC) tie would be excluded from the revenue requirement and handled separately. WAPA's CRSP transmission system would be in a single owner zone.

**MEAN 3:** MEAN commented that the cost allocation design proposed by Mountain West may become an additional administrative burden for entities with load on both sides of the Direct Current (DC) ties to track, validate and calculate pass-through costs to customers, particularly since Southwest Power Pool (SPP) has historically had numerous resettlements and adjustments. It will also likely be an administrative burden to SPP staff to maintain/settle/resettle (etc.) separate Schedule 11 costs for SPP-East and SPP-West.

**RESPONSE:** WAPA acknowledges this concern and confirms the matter was discussed among the Mountain West participants. Mountain West has attempted to minimize and simplify proposed changes to current SPP practices to minimize the complexity. The



proposed changes reflect the minimum terms that enabled the Mountain West participants to negotiate membership with SPP. WAPA will continue to strive for simplification throughout the process to minimize the complexity for all involved.

**MEAN 4:** MEAN commented about the costs that could be allocated to those with reservations across the Direct Current (DC) ties, and encourages those cost impacts be known and equitable, prior to the transition.

**RESPONSE:** WAPA and the other Mountain West participants attempted to propose a reasonable cost allocation methodology that recognizes the value of the DC ties to both reservation holders and the market footprint as a whole. The methodology being considered in the SPP stakeholder process includes reservation holders converting auction revenue rights (ARRs) to transmission congestion rights (TCRs) and thus paying a fair share of the annual transmission revenue requirement (ATRR) for the DC ties. The balance of the ATRR for the DC ties would be paid by all network load and point-to-point service within Southwest Power Pool. The results of the SPP stakeholder process would be filed with Federal Energy Regulatory Commission (FERC) in advance of SPP membership becoming effective.

**MEAN 5:** Citing a [November 2017 SPP Market Working Group presentation](#), MEAN commented that operating a single market across an SPP-East Balancing Authority (BA) and an SPP-West BA will be extremely complex. As examples, MEAN highlights that:

- SPP intends to have two Security Constrained Unit Commitments (SCUC's), one for SPP-East and one for SPP-West, with each BA's SCUC run biased with an initial condition across the Direct Current (DC) ties.
- There will be two marginal energy costs, one for each BA.
- Regulation will be separated between SPP-East and SPP-West and each BA will have independent market clearing prices for regulation products.
- SPP will deploy reserves separately in SPP-East and SPP-West.

MEAN is concerned that these items will lead to significantly more administrative time, as well as hardware/software needs and will manifest in additional expenses.

**RESPONSE:** Recognizing that operating a market across the DC ties will be a new paradigm, SPP and the Mountain West participants will use conservative approaches focused on ensuring reliability, while operational experience is being developed. For this reason, SPP will perform two SCUCs: one for the SPP-East BA and one for the SPP-West BA. However, the Security Constrained Economic Dispatch (SCED) will be one market solution for both BAs. Although SPP-East and SPP-West will have discrete marginal energy costs, it is expected that the locational marginal prices (LMPs) will converge (or approach convergence) when there is minimal to no congestion on the DC ties.

While this is a more complicated approach than what currently exists in SPP-East, WAPA and other Mountain West participants anticipate the methodology to be a superior solution in terms of reliability, economics and transparency compared to the bilateral



energy transactions, contract-path transmission arrangements and rate pancaking that are currently the paradigm in the Mountain West footprint.

Although the inclusion of Mountain West in SPP is expected to create additional complexities for SPP's operations and settlements, the benefits of the Mountain West participants joining SPP are significant and would accrue for both SPP-East and SPP-West, as indicated in the [Glarus DC-Tie Study](#) and SPP's cost/benefit analyses. SPP's estimate shows a \$209 million benefit to existing SPP members over the first 10 years. This net benefit to existing members cannot be realized without investing in the additional administrative time, as well as the necessary hardware/software. WAPA sees the benefits outweighing the additional complexity.

**MEAN 6:** MEAN expressed a concern that the Westside Transmission Owners Committee (WestTOC) proposed by Mountain West would result in the Southwest Power Pool (SPP) Board not having ultimate/unilateral authority and that having a single Regional State Committee (RSC) with East and West components would create an administrative burden.

**RESPONSE:** Under the WestTOC proposal, the SPP Board would continue to have authority over SPP-East matters and most SPP-West matters, but certain limited SPP-West matters would be reserved to the WestTOC, on which WAPA would have representation. The specifics of this arrangement are being negotiated.

Regarding the concern about an administrative burden related to an RSC with East and West components, WAPA asserts the benefits of the Mountain West participants joining SPP are significant for both SPP-East and SPP-West members, and that the benefits outweigh the additional complexities.

**MEAN 7:** MEAN commented that possible changes to LAP contract pumped storage provisions may cause harm to the contracting entities. MEAN believes that it is imperative the current pumped storage users are involved in the discussions related to pumped storage and its treatment in the transition to SPP.

**RESPONSE:** WAPA notes the concern expressed, and will include customers in discussions of any possible changes to the LAP pumped storage contract provisions. As discussed in the WAPA forum in Loveland, Colorado, Nov. 9, a transition to a market environment would bring significant changes to the operational environment of Mt. Elbert pumped-storage powerplant and facilities, and so a thorough discussion and evaluation will be needed to ensure WAPA and the LAP customers optimize the full benefit of Mt. Elbert.

**MEAN 8:** MEAN commented that under the proposal customers with firm electric service allocations may pay twice for the same transmission to receive their allocation. Based on information provided in the WAPA presentations, participants with firm electric service allocations will already be experiencing increases of 16.6 percent (LAP) and 117.8 percent



(CRSP) in network transmission rates. If customers are no longer credited for the transmission they pay for in their firm electric service rates, this will bring additional financial impact to these communities' transmission costs by forcing them to pay twice for the same service.

**RESPONSE:** WAPA's firm electric service rate includes a bundled transmission service cost. WAPA would continue to cover transmission service costs across each of its project's transmission systems as part of its bundled product, as is done today. Customers would remain responsible for the transmission service cost beyond WAPA's transmission system, as they are today. WAPA is not proposing to unbundle the firm electric service product. If WAPA were to join SPP, WAPA would save the pancaked rate paid today to bring the off-system allocations to the edge of the WAPA transmission system. WAPA does not propose additional changes to its firm electric service product at this time.

Although transmission rates are estimated to increase, there will also be the offsetting benefit of dropping any pancaked rate payments across the entire SPP footprint for non-federal hydropower resources, as well as realizing the generation optimization benefits of market operations across such a large de-pancaked transmission system.

**MEAN 9:** MEAN asked how the maintenance costs for the Direct Current (DC) ties will be allocated.

**RESPONSE:** The Mountain West proposal includes normal operations and maintenance costs in the annual transmission revenue requirement. Details regarding more significant operations and maintenance cost treatment are still being considered. WAPA recommends following the Southwest Power Pool stakeholder process regarding this topic.

**MEAN 10:** Regarding the SPP administrative fee, MEAN questioned if historically there has been a time when entities have joined an independent system operator (ISO) or regional transmission organization (RTO) and the administrative fees went down for a sustained period of time. The concern is that the reduction is temporary (one year) and administrative fees will then increase. This means the market would not realize a benefit of reduced administrative fees, which is a justification used by Mountain West to request a reduction in administrative fees during the phase-in period.

**RESPONSE:** In general, an RTO expanding membership results in lower administrative fees compared to membership that does not expand. Regardless of whether other cost increases cause administrative fee increases, the cost savings from an expanded footprint is permanent. Southwest Power Pool's estimate for Mountain West integration into SPP shows over \$150 million of administrative fee savings for existing SPP members. A combined SPP-East and SPP-West market footprint is a significant opportunity for SPP members to reduce costs both initially and into the future. The three-year phase-in of the full benefit to SPP-East members (i.e., the reduced



administrative fees for Mountain West participants) is intended for Mountain West participants to transition into market operations, implement necessary changes and increasingly realize RTO benefits. The proposed phase-in was carefully balanced to still enable SPP-East members to realize initial financial benefits from the expansion.

**MEAN 11:** MEAN would like to ensure that any provisions offered to new members would be offered to all SPP-West members, not just Mountain West.

**RESPONSE:** WAPA notes the concern expressed, and agrees that if the recommendation moves forward many details will be worked out during final negotiations with SPP.

**MEAN 12:** MEAN commented that decisions are being made on what information is known at this time at a high level. A lot of details will emerge and the technical aspects of what Mountain West is asking for may not match with what the market is currently set up to do.

**RESPONSE:** WAPA is weighing the risks and benefits, and will make an informed decision in a transparent manner. WAPA notes that if the recommendation moves forward, many additional details will be worked out during the final negotiations with SPP and during the time before initial implementation. WAPA will negotiate modifications if necessary throughout the process.

**MEAN 13:** MEAN commented that achieving common goals of maintaining a low cost power supply and mitigating unintended consequences to preference customers should be paramount as more details of WAPA's transition to Southwest Power Pool are considered and determined.

**RESPONSE:** WAPA agrees that minimizing adverse effects to preference customers is an important factor in the decision to pursue final negotiations for membership in Southwest Power Pool. WAPA has identified and pursued accommodations for cost shift mitigation for CRSP, as well as a federal service exemption as a non-negotiable requirement for WAPA's CRSP and LAP to participate in SPP.

**MEAN 14:** MEAN appreciates the attention WAPA has demonstrated to get the perspective of preference customers.

**RESPONSE:** WAPA has provided regular updates on Mountain West at customer meetings over the past three years. WAPA values the feedback provided by customers and other stakeholders.

**MEAN 15:** MEAN asked if there will be a safe harbor limit for SPP-West transmission projects to protect network customers.

**RESPONSE:** As is the case in the Mountain West footprint today, Mountain West has not proposed a safe harbor limit.



## Navajo Tribal Utility Authority (NTUA)

**NTUA 1:** NTUA commented that CRSP is negotiating for its own interests and that CRSP customers will see impacts to other areas of their operations outside of firm electric service deliveries. NTUA is concerned that it may be allocated additional costs for little or no additional benefit, and that the promise of improved access to markets may not necessarily be feasible.

**RESPONSE:** WAPA has been working hard to protect the interest of the CRSP and LAP customers with firm electric service allocations, and the two projects would be unable to participate in this initiative unless adverse impact to its firm electric service deliveries are mitigated. WAPA acknowledges the commenter's concern that there may be additional impacts to CRSP customers outside of the FES deliveries and WAPA is working to minimize those as well. However, as outlined in WAPA's recommendation report, WAPA anticipates that markets are coming to the West and that customers will likely face these impacts regardless of whether or not CRSP joins SPP. Pursuing market participation now, while WAPA can negotiate for a cost shift mitigation agreement and secure the federal service exemption, is the best path forward to continue to meet WAPA's statutory obligations and provide federal power to its preference customers.

**NTUA 2:** NTUA commented that Southwest Power Pool's Highway/Byway approach to cost allocation represents a compromise between a "Postage Stamp" regional approach and a "License Plate" zonal approach and is designed to minimize the winners and losers. The commenter does not believe that the zonal rate design proposed for CRSP properly allocates transmission costs and is not workable.

**RESPONSE:** WAPA agrees that the Highway/Byway cost allocation methodology used by SPP to allocate Base Plan transmission upgrades seeks to better align the costs and benefits associated with transmission system upgrades to the beneficiaries of these upgrades. The Southwest Power Pool methodology to allocate Base Plan transmission upgrades is outlined in the SPP Tariff, Attachment J., Section III, part A., Allocation of Base Plan Upgrade Costs Eligible for Cost Allocation.

Although not referred to as a Highway/Byway cost allocation methodology, the proposed Mountain West regional allocation methodology takes the same approach. The Mountain West participants are proposing a transmission cost allocation methodology that assigns the beneficiaries of the new transmission a greater proportion of the costs. In addition, the federal power delivered to its statutory load will be exempt from any regional cost allocation.

As presented at the WAPA forums, Nov. 9 and 14, the transmission cost allocation methodology the Mountain West participants are proposing is as follows:



- For projects greater than \$15 million and voltage 300 kilovolts (kV) or higher - 100% regionally allocated
  - 50% by load ratio share and 50% by zonal benefit test
  - CRSP federal power serving CRSP load is exempt from this charge (federal service exemption)
- For projects greater than \$15 million and voltage between 200kV-300kV - 100% regionally allocated
  - 30% by load ratio share and 70% by zonal benefit test
  - CRSP federal power serving CRSP load is exempt from this charge (federal service exemption)
- For projects less than \$15 million or voltage less than 200kV - 100% zonally allocated

As WAPA has consistently represented in various forums, the Mountain West participants are proposing a hybrid License Plate – Postage Stamp transmission rate design. Mountain West is proposing a zonal (License Plate) design, with each participant’s load paying the zonal rate in which it sinks. It is also proposing a Postage Stamp rate for point-to-point transactions that leave the footprint. This Postage Stamp rate is the average of the zonal rates.

In sum, although the Postage Stamp and License Plate ideas apply to transmission rate design and the Highway/Byway methodology applies to cost allocation for future projects, the Mountain West participants have incorporated aspects of all of these constructs in order to help ensure that the beneficiary will pay in SPP-West, just as a beneficiary does today.

**NTUA 3:** NTUA commented that it does not agree with the zonal rate design because most of CRSP’s load is in another zone or outside of the market footprint, which would cause the load within the zone to bear a greater proportion of the annual transmission revenue requirement (ATRR). Although the current cost shift mitigation agreement may mitigate some of this cost shift for the first seven years, the commenter believes that this is not adequate since the cost shift will continue to exist past the seven year mitigation period. The commenter believes that the rate design should be re-evaluated to address CRSP's unique situation.

**RESPONSE:** WAPA acknowledges the commenter’s concern with the unique aspects of fitting CRSP into the zonal rate design construct. WAPA’s CRSP transmission system was built specifically to deliver federal hydropower to its preference customers, as NTUA notes, which is a different purpose than many of the other Mountain West participants. As the NTUA points out, CRSP is unique in that most zones will have all of the zonal load within the zone and directly connected to zonal transmission facilities, but WAPA’s CRSP transmission system does not.

Although CRSP has some unique characteristics it will need to adapt to the zonal rate design construct, the primary purpose of the CRSP transmission system remains



unchanged. Its primary purpose is to deliver federal power to preference customers and, as such, the firm electric service customers will continue to have the majority of the responsibility for the annual transmission revenue requirement (ATRR) as they do today.

Additionally, the Mountain West proposed rate design is very similar to the existing Southwest Power Pool (SPP) rate design with some small changes (i.e. Postage Stamp rate for transactions exiting the footprint). Rate design was the subject of much debate and negotiation between the Mountain West participants, and is the design that has been agreed to by all of the participants.

The cost shift mitigation agreement that WAPA's CRSP has negotiated with the other Mountain West participants protects the CRSP firm electric service customers from any adverse rate impact. The \$11 million per year CRSP will receive in mitigation will alleviate the initial cost increase CRSP would see across all of its operations, not just transmission. Although it has not been determined how much of the \$11 million will be applied to transmission, CRSP intends to apply some portion of the mitigation to the transmission side, and this will lower the ATRR during the first seven years. The exact amount that gets applied to the ATRR will be dependent on the actual costs that CRSP experiences if it joins a market.

**NTUA 4:** NTUA believes that the rate design should be revisited. The CRSP transmission rate is proposed to increase, and NTUA believes that the CRSP annual transmission revenue requirement (ATRR) should be allocated to those entities that benefit from being able to use the extensive CRSP transmission system. NTUA suggests splitting the current CRSP zone into two zones.

**RESPONSE:** Similar to the rate design WAPA has today, under the proposed rate design the firm electric service customers will be the entities primarily responsible for the transmission costs. Today, since the CRSP firm electric service deliveries have the cost of transmission bundled in the firm electric service rate, the firm electric service customers are responsible for approximately 80 percent of the annual transmission revenue requirement (ATRR). In a market, the firm electric service customers would be responsible for the same approximate amount of ATRR. WAPA estimates that the CRSP transmission rate will increase, due mostly to the reduction in the transmission rate denominator when CRSP uses network service instead of point-to-point transmission service for its firm electric service deliveries. It is estimated that the rate denominator will go from approximately 4,527 megawatts (MW) today to approximately 2,099 MWs in a market. Of this estimated 2,428 MW reduction, the WAPA CRSP move to network service accounts for approximately 72.4 percent. Because this increase is driven primarily by CRSP's transition to network service for its firm electric service deliveries, this increase may occur regardless of joining a regional transmission organization. For example, if WAPA was required to use network service for its firm electric service deliveries without joining a market (i.e. if Western Electricity Coordinating Council



adopted a flow gate model), this increase in transmission rate would be seen regardless of market participation.

WAPA believes that the zonal rate construct, with CRSP being a single entity zone, as presented over the course of WAPA's presentations, is appropriate. The zonal construct and rate design agreed to by the Mountain West participants was developed after significant analysis and discussion. This construct ensures that the firm electric service customers maintain responsibility for the largest portion of the ATRR in line with the intent of the system, as well as the historical cost responsibilities for the CRSP system. Dividing the current CRSP zone into two zones would not change the impact. It would split the current ATRR into two, with CRSP firm electric service customers responsible for the same proportion of the ATRR in both zones, and would therefore provide no benefit.

In addition, if another Mountain West participant is using the CRSP transmission system to serve its load, it will need to pay the CRSP zonal rate and the revenue will return to CRSP. If another Mountain West participant is using the CRSP transmission system for a point-to-point transaction that leaves the footprint, CRSP will also receive the benefit from these transactions since the revenue allocation for the Postage Stamp rate will assign 60 percent of the revenue to the megawatt-miles of transmission used for that transaction.

**NTUA 5:** As a load serving entity located on the CRSP transmission system, NTUA is concerned about the future cost of CRSP transmission if the proposal to join SPP moves forward. NTUA is concerned that projected increases in transmission costs may make its proposed generation development uneconomic and requests a grandfathered exemption from regional through and out revenues (RTOR) costs and associated charges.

**RESPONSE:** WAPA will continue to use the Open Access Same-Time Information System (OASIS) to offer any transmission beyond what is needed for firm electric service deliveries on a first come, first serve basis. Any transactions made under the Open Access Transmission Tariff (OATT) are required to meet open access requirements. Third party transactions fall outside of the WAPA's statutory obligations and are required to meet Federal Energy Regulatory Commission (FERC) standards. This protocol is required for reciprocity under the current OATT and would be required under a FERC jurisdictional tariff administered by Southwest Power Pool.

**NTUA 6:** NTUA commented that modeling assumptions did not consider a fully integrated SPP-East plus Mountain West scenario. Modeling focused primarily on optimizing Mountain West operations and the Direct Current (DC) ties, rather than conducting a composite Southwest Power Pool (SPP) market analysis, and assumed a status quo scenario for the rest of Western Electricity Coordinating Council (WECC), which may result in an inaccurate depiction of actual congestion impacts and congestion revenue rights.



**RESPONSE:** Currently, in WAPA’s Upper Great Plains region the federal service exemption removes impacts from marginal congestion and marginal losses from the lesser of federal resources and loads bid into the day-ahead market. WAPA’s CRSP and LAP expect to receive the same treatment in SPP under the federal service exemption. Due to the federal service exemption providing a full hedge from congestion and marginal loss components, resources and loads covered by the federal service exemption are not eligible to participate in congestion markets.

Brattle study results did not include Direct Current (DC) tie optimization between the Mountain West and SPP footprints. The [Glarus DC-Tie Study](#) demonstrates DC-tie optimization benefits in addition to the Brattle study results. In the event that SPP uses the existing 720 megawatts of DC-tie capacity to optimize flows between SPP-East and SPP-West, the resulting DC tie loss values would need to net against the benefits to both markets from this flow optimization. The [Glarus DC-Tie Study](#) indicates that net benefits would be positive. If net benefits were negative, the DC ties would not be used.

**NTUA 7:** NTUA is concerned that historic transmission line rights of way granted to the United States across the Navajo Nation were for the use of the federal government. Now, WAPA is seeking to change the use of the rights of way by allowing control over the operation of the electric transmission lines to be passed to a non-federal governmental agency, without consent of the Nation.

**RESPONSE:** WAPA is sensitive to the commenter’s concern and will continue to work with NTUA throughout this process. The primary purpose and use of the transmission lines will not change, as WAPA will continue to fulfill firm electric service deliveries. WAPA personnel will also continue to operate and maintain those lines. As is true today, any unused transmission will be offered for use by third parties on the Open Access Same-Time Information System (OASIS) per FERC open access requirements.

**NTUA 8:** NTUA does not believe that WAPA’s process to reach a recommendation to join SPP included sufficient transparency. NTUA is therefore requesting that the process toward a final conclusion be delayed to allow all potential participants the opportunity for a thorough vetting of all analysis associated with the creation of transmission and market-related costs.

**RESPONSE:** WAPA acknowledges the commenter’s concern but continues to assert its effort to ensure a transparent process and open communication with customers on the status of this initiative. WAPA has presented updates 14 times during the course of the past year in general customer meetings, as well as meetings with specific customers including NTUA and its representatives. Information that has not been released is Mountain West participants’ proprietary information protected by the signed non-disclosure agreement (NDA), and has very little impact on the CRSP specific analysis and results.

Additionally, WAPA outlined the basis and explanation for the recommendation in the “Recommendation to Pursue Membership in the Southwest Power Pool Regional Transmission Organization” report. The report and the analysis used as the basis for this recommendation, specifically the Brattle Study summary and the Argonne Analysis, are posted on WAPA’s website.

Due to the complexity of seeking final negotiations, delays in moving forward could create additional risks to the long-term economic impacts for CRSP. Moving forward with final negotiations allows for more flexibility and continued discussions in an effort to address specific concerns related to CRSP and its customers. Seeking final negotiations does not obligate CRSP to join the Southwest Power Pool market and creates further leverage for CRSP to negotiate on behalf of its customers.

WAPA will continue to provide periodic updates to its customers on this initiative.

## Nebraska Public Power District (NPPD)

**NPPD 1:** NPPD expressed concern about the impact to LAP transmission customers and requested information concerning how WAPA’s existing transmission service would be affected by WAPA joining Southwest Power Pool (SPP).

**RESPONSE:** If WAPA’s Rocky Mountain (RM) region were to join SPP with the LAP transmission system under the current proposed terms, the LAP transmission system would be in a single zone and have a single zonal rate, much like how WAPA structures the LAP transmission system rate today. Service using the LAP transmission system would change from being under the WAPA Open Access Transmission Tariff (OATT) to the SPP OATT, and customers would have access to the entire SPP network rather than be limited to the LAP network. The transmission rate for the LAP zone would be primarily impacted by the following changes that joining SPP would bring: (1) The rate denominator would decrease by the pancaked LAP transmission service that is terminated; (2) the Sidney Direct Current (DC) tie Annual Transmission Revenue Requirement (ATRR) would be excluded from the LAP zonal rate; and (3) the Cheyenne Light, Fuel and Power transmission system ATRR would be integrated into the LAP zonal rate (the load is included in the LAP rate today, as Cheyenne Light, Fuel and Power is a LAP transmission customer).

The fiscal year 2018 LAP transmission rate is \$3.95/kilowatt (kW)-month and, as shown in the presentation from WAPA’s forum, in Loveland, Colorado, Nov. 9, is estimated to be \$4.04/kW-month by fall of 2019. If WAPA’s Rocky Mountain region were to join SPP in fall of 2019, the LAP transmission zonal rate is estimated to be \$4.91/kW-month. Upon further refinement since the presentation was developed, WAPA’s latest estimate of the LAP zonal rate is \$4.71/kW-month. However, the reader should keep in mind these are only estimates.



**NPPD 2:** NPPD expressed concern about the impact of WAPA LAP joining Southwest Power Pool (SPP) with load currently taking service in an existing SPP zone, but where the load is connected to WAPA transmission lines. The question was asked how that load will be served when WAPA becomes a Transmission Owner in SPP and about the cost of that transmission service.

**RESPONSE:** As is the case across SPP’s footprint, load on an SPP member transmission system (i.e., served by that transmission system) is part of that transmission system’s zonal denominator and any pancaked transmission system/zone prior to that final transmission system/zone would eliminate that load from its zonal rate denominator. As new transmission systems/zones are added to the footprint, the customers of impacted zones (zones that have denominators reduced) gain the benefit of an expanded SPP footprint, increased market optimization capabilities, and reduced administrative fees due to a larger customer base to share those costs.

More specifically, the load directly connected to the LAP transmission system would become part of the LAP zone and would pay the LAP zonal rate.

**NPPD 3:** NPPD requested that WAPA provide all cost impact studies performed in connection with its recommendation for CRSP and LAP to join Southwest Power Pool (SPP) and to provide additional cost impact information related to cost shifts and rate impacts upon customers of WAPA and SPP.

**RESPONSE:** All of the studies and analysis that WAPA used for its recommendation are summarized in the “Recommendation to Pursue Membership in the SPP RTO for CRSP and LAP” report, which is available on WAPA’s website at <https://www.wapa.gov/About/keytopics/Pages/Mountain-West-process.aspx>. In addition, the results of the adjusted production cost studies and other documents are posted on WAPA’s website.

## Platte River Power Authority (PRPA)

**PRPA 1:** PRPA supports WAPA's recommendation to pursue final negotiations regarding membership in a regional transmission organization (RTO), specifically the Southwest Power Pool (SPP). As studies have shown, an RTO and with a fully integrated market will provide significant economic benefits to electric customers in the Rocky Mountain region. These economic benefits flow directly from operational efficiencies offered by SPP, including greater access to resources and the opportunity for a more economic dispatch of generation. These benefits could not be realized absent WAPA’s participation in SPP’s RTO.

**RESPONSE:** WAPA appreciates the commenter’s support and concurs that the Brattle Group Study shows an estimated potential benefit on the resource side between \$71 million to \$128 million per year in the year 2024. The study is available at



<https://www.wapa.gov/About/keytopics/Pages/Mountain-West-process.aspx>. WAPA also recognizes that Mountain West's efforts to realize the economic and reliability benefits of joining an RTO would likely not be feasible without WAPA's participation. This is one of the many reasons WAPA has continued to support the Mountain West effort for the overall good of the electric utility industry.

**PRPA 2:** PRPA commented that during the past four years, the Mountain West participants have worked diligently to evaluate the benefits of joining an existing regional transmission organization (RTO) and to negotiate for the best possible outcomes for customers. During these formative discussions, WAPA and other public power entities have sought protections for public power customers. One of the most important agreements reached by Mountain West involves the cost shift mitigation for CRSP. From the beginning of the RTO evaluation and negotiation process, WAPA has held solid to the position that it will not join if its cost shifts are not mitigated to zero during the transition period. The cost shift mitigation agreement includes the guarantee of an annual cost shift mitigation payment for the first seven years to protect the WAPA firm electric service customers. The commenter is appreciative of the efforts WAPA has put forth to insulate its customers from cost shifts that will occur from market expansion.

**RESPONSE:** WAPA agrees that one of its highest priorities is to ensure there is minimal to no financial impact to the CRSP and LAP firm electric service rates. Because there is a potential negative cost shift to CRSP firm electric service customers, WAPA appreciates the willingness of the Mountain West participants, including the public power entities, to mitigate those cost shifts during the initial seven-year transition period. The general terms of the cost shift mitigation agreement have been agreed upon, and WAPA's decision about whether or not to commit CRSP and LAP to SPP RTO membership is contingent upon the successful final negotiation and execution of the cost shift mitigation agreement.

**PRPA 3:** PRPA is in full agreement with WAPA's assessment that markets are inevitable. It is unlikely that WAPA would be able to as effectively negotiate future protections for its customers if it were to delay or decide not to join SPP. The proactive participation of WAPA during the formative stages of Mountain West and the customer protections that WAPA has been able to negotiate during this process are the most effective strategy for both WAPA and its customers. Regional transmission organization (RTO) membership is a good hedge for future market scenarios, and PRPA is in full support of WAPA's recommendation.

**RESPONSE:** WAPA agrees that there is greater opportunity and ability to negotiate protections for firm electric service rates and customers by negotiating with and among the Mountain West participants regarding potential SPP membership. If WAPA delays its decision or decides to not join Southwest Power Pool (SPP) at this time, WAPA will lose its opportunity to negotiate a cost shift mitigation agreement with other Mountain West participants. Furthermore, WAPA will lose its ability to influence the initial zonal definitions, regional and zonal cost allocation principles and governance structure for proposed SPP-West transmission owners. If other entities surrounding WAPA were to



move forward with market participation without WAPA, WAPA would likely lose a majority of its bilateral trading partners and end up needing to join SPP or another RTO on its own sometime in the future. WAPA appreciates the commenter's support of the recommendation.

## Public Service Company of Colorado (PSCo)

**PSCo 1:** PSCo commented that it has recognized the benefits of wholesale energy markets to improve efficiency and reliability of the bulk electric system. Similar to WAPA, PSCo has affiliates already operating in regional markets. Regional markets can yield more efficient energy dispatch, reduce planning and operating reserve obligations, and by pooling resources can enhance reliability and improve the efficiency of renewable resource integration.

PSCo's evaluation of Mountain West indicates positive results through participation in the Southwest Power Pool (SPP) regional transmission organization (RTO), with its full menu of wholesale market services including expanded transmission access, co-optimization of energy with ancillary services, reliability optimization in unit commit and dispatch and more efficient regional oversight of resource adequacy.

**RESPONSE:** WAPA appreciates the commenter's participation in Mountain West and agrees with the analysis regarding the benefits of participating in wholesale energy markets.

**PSCo 2:** PSCo commented that each of the Mountain West utilities has made concessions in order for the group to remain together and committed to the collective goals of efficiency and reliability. Furthermore, Mountain West efforts would not be possible and will not proceed without including the major transmission and generation systems of the participants, and that both WAPA's LAP and CRSP systems fall clearly within this definition. As such, the non-WAPA Mountain West participants have agreed to a number of concessions to help LAP and CRSP remain committed to the effort. The major concessions are cost shift mitigation for the CRSP system, administrative fee mitigation for CRSP, and support of the federal service exemption for LAP and CRSP.

**RESPONSE:** WAPA appreciates that all Mountain West participants have made concessions in order for the group to remain together in support of the common goals of efficiency and reliability, and the group's collaborative work to evaluate the benefits gained by evaluating participation collectively. WAPA appreciates the group's willingness to negotiate a cost shift mitigation agreement and support the federal service exemption provisions for LAP and CRSP to minimize the impact to firm electric service customers and allow WAPA to participate in this initiative.

**PSCo 3:** PSCo congratulated WAPA on the experience and expertise it has brought to this effort. PSCo believes that WAPA should continue to participate in the Mountain West effort with



Southwest Power Pool (SPP) and, assuming the project is completed, join SPP to help bring the benefits of organized wholesale markets to the Western interconnection. Thank you for your consideration of our comments.

**RESPONSE:** WAPA appreciates the commenter's support.

## Salt River Project (SRP)

**SRP 1:** SRP commented that the historic Exchange Agreement between WAPA and SRP is integral to WAPA's CRSP transmission system and should be embodied within WAPA's federal service exemption.

**RESPONSE:** WAPA appreciates the comment and agrees with Salt River Project (SRP) regarding the importance of the SRP Exchange Agreement and the benefit it provides to both SRP and WAPA. WAPA continues to negotiate with Southwest Power Pool (SPP) regarding the applicability of the federal service exemption to the SRP Exchange Agreement.

**SRP 2:** SRP commented that the Salt River Project (SRP) Exchange Agreement with WAPA's CRSP is not accurately described in the Argonne Analysis. Argonne described the agreement as being designed to relieve contractual transmission congestion, references WAPA instead of the Bureau of Reclamation as the contracting entity, and does not appropriately characterize SRP's thermal generating units.

**RESPONSE:** WAPA thanks the commenter for the clarification and agrees that the wording used in the Argonne Analysis does not fully capture the breadth of the SRP Exchange Agreement.

As the commenter points out, at the time the Exchange Agreement was entered into in 1962, WAPA had not been created and the Bureau of Reclamation was the contracting entity. The Exchange Agreement was developed for a number of reasons, but the overarching purpose was to support the federal government in fulfilling its statutory obligation to ensure widespread use of federal power at the lowest possible rates to consumers consistent with sound business principles. Congress had directed the Bureau of Reclamation to find an alternative solution to an all federal transmission system and by entering into the agreement the government was able to modify the design of the CRSP transmission system and thereby optimize available funding and avoid additional transmission construction costs, significant transmission losses and additional operation and maintenance costs.

**SRP 3:** SRP commented that WAPA's delivery of energy from Craig and Hayden via the Exchange Agreement should be assigned a negative congestion charge. SRP disagrees with the direction of energy flows described in the Brattle Study and questions whether sufficient consideration

was given to the Exchange Agreement's beneficial impact on transmission path TOT-2A congestion.

**RESPONSE:** WAPA appreciates SRP's careful review of the Brattle Study and believes that the TOT-2A flows were mislabeled in the Brattle Study as south to north when the data represent the flows from north to south.

Today, the TOT-2A cut plane exists on three Colorado transmission lines that are located between Montrose and San Juan, New Mexico. Congestion is caused by several factors: low voltage and emergency overloads on the local 115-kilovolt (kV) system; emergency overloads on local 230/115 kV or 345/115 kV transformers; and parallel (loop) flow caused by transfer levels between major load areas of Western Electricity Coordinating Council (WECC).

WAPA is currently negotiating with SPP to identify some provisions of the Salt River Project (SRP) Exchange Agreement that could be covered under the federal service exemption for CRSP. If successful, these provisions will not be subject to marginal congestion and marginal loss charges or credits.

**SRP 4:** SRP suggests that the calculation of the SRP Exchange Agreement economic impact for TAG 2X should be the same as the calculation of the SRP Exchange Agreement economic impact associated with TAG 4X. In the Argonne Analysis, no economic impact is associated with TAG 4X deliveries from SRP Four Corners generation to CRSP New Mexico loads because the delivery and receipt points are considered to be at the same location. However, an economic impact is associated with TAG 2X deliveries from SRP Craig to Northern CRSP loads because the delivery and receipt points are not considered to be at the same location. SRP asserts that the TAG 2X calculation should be the same as the TAG 4X calculation because the delivery points are the Craig, Hayden and Four Corners substations.

**RESPONSE:** WAPA acknowledges that energy exchanged under the Salt River Project (SRP) Exchange Agreement is delivered to CRSP at the delivery points of Craig, Hayden and Four Corners substations. However, the load being served by CRSP is not located at these delivery points.

For Craig/Hayden energy (TAG 2X), the energy serves CRSP load across the CRSP system and locational marginal prices (LMPs) could differ at each load settlement location served by this resource. For Four Corners energy (TAG 4X), the load is normally served in the Public Service Company of New Mexico (PNM) Balancing Authority (BA) and both resource and load remain outside the initial Mountain West footprint.

There may be times when Four Corners generation exceeds CRSP loads in the PNM BA and could be offered into SPP as a CRSP resource resulting in different locational marginal prices (LMPs) at the generation and load settlement areas, as in the case of Craig and Hayden.



Additionally, CRSP is negotiating with SPP to identify some provisions of the Salt River Project (SRP) Exchange Agreement that could be covered under the federal service exemption for CRSP. If successful, these provisions will not be subject to marginal congestion and marginal loss charges or credits.

**SRP 5:** SRP suggested that WAPA perform additional production cost sensitivity analyses based on a variance in the locational marginal prices (LMPs) between the Mountain West full market analysis and the SRP energy imbalance market (EIM) analysis. The commenter referenced that the same TEPPC 2024 base case was used in both studies and that the LMP results should be more similar between the two studies for the Palo Verde trading hub.

**RESPONSE:** WAPA appreciates the commenter’s thorough review of the Brattle Study results and notes that there will inevitably be differences in model outputs based on a number of factors including modelling approach, baseline datasets, and scenario assumptions. For Mountain West, the production cost modelling performed was for a fully integrated market (i.e., co-optimized unit commitment, capacity, energy, ancillary services, and transmission utilization) and was for the day-ahead time horizon. This differs from EIM production cost modelling that focuses on energy-only in a real-time market. Because day-ahead and real-time prices do not tend to be equal, the variance between the Mountain West day-ahead LMPs and the EIM real-time LMPs is within the expected range.

Regarding the data sources, the Brattle Study used the TEPPC 2024 base case as the starting point for the analysis. The Mountain West participants then refined and expanded the dataset by incorporating proprietary information about their respective assets and contracts. It is standard practice for entities to refine the TEPPC datasets with non-public information for analyses specific to their operating areas, and the Mountain West participants put considerable effort into making the data as accurate and comprehensive as possible.

For the assumptions used in the modelling, the Mountain West participants worked extensively with Brattle to develop baseline and scenario assumptions for energy demand, gas prices, transmission capacity, available generating capacity, and other variables. The assumptions used in the Mountain West analyses are tailored to the footprint and are robust for the analyses performed.

WAPA performed extensive sensitivity analysis including over 300 different combinations of natural gas prices and hydrological conditions. Staff were diligent in considering a wide range of potential futures, while estimating the potential implications of market participation for WAPA and its customers. With the caveats that no model is perfect and there are always additional sensitivities that could be performed, WAPA stands by the sufficiency of the analysis and staff is available to discuss the modelling in further detail upon request.



**SRP 6:** SRP commented that WAPA estimated its transition costs to the Southwest Power Pool (SPP) regional transmission organization (RTO) would be approximately \$0.81 million, but these costs seem to be significantly different from what entities have estimated for energy imbalance market (EIM) participation. SRP estimated its total implementation cost for the California Independent System Operator's (CAISO) EIM would be \$21.2 million. SRP asked if WAPA may have underestimated the costs associated with centralized market participation.

**RESPONSE:** WAPA's regional transmission organization (RTO) analysis is based on membership as a Southwest Power Pool (SPP) full market participant versus that of a California Independent System Operator (CAISO) EIM-participating balancing authority (BA). If WAPA decides to join SPP, WAPA's CRSP would only be responsible for incurring metering costs for CRSP generation, associated load settlement areas for firm electric service load obligations, and several boundary meters on the borders of the CRSP transmission zone. WAPA's CRSP would not be responsible for other Mountain West/SPP participants' assets that currently exist in the Western Area Colorado-Missouri (WACM) BA that are required for SPP RTO operation. Also, WAPA is not counting costs that would be incurred regardless of RTO participation. Examples include metering replacement projects underway and new scheduling and accounting software already being procured. While implementation costs have the potential for cost variances, the current estimated costs are reflective of the most current available information and insights from WAPA Upper Great Plains (UGP) region's participation in SPP. Adjustments to these estimates will be made if appropriate as more granular information becomes available.

Reflected in the estimate is anticipated metering protocol compliance. WAPA's CRSP staff is currently working with both SPP and the Bureau of Reclamation to identify potential generation metering protocols to pursue a phased-in, multi-year implementation. This would allow CRSP to work with the current 10-year maintenance plan to make upgrades as needed, while reviewing planned projects that meet both newer metering standards and SPP metering requirements. This process, used by WAPA UGP, aims to isolate and address superfluous costs throughout implementation.

Load metering criteria are also being reviewed. Currently, there are no significant upgrades anticipated outside of planned maintenance. Many of the load meters within the WACM BA boundaries would continue to be maintained by the individual Mountain West participants if Mountain West joins SPP. CRSP will provide static, co-supply schedules for the portion of each customer's load that is obligated under the firm electric service contracts within the footprint. This is similar to the way WAPA UGP addresses firm electric service load as it relates to load metering requirements.

WAPA will continue to keep its customers informed of its estimated implementation costs as it continues to determine what these will be.

**SRP 7:** SRP requested additional clarification on the term additional optimization in the Argonne Analysis and asked how WAPA plans to further optimize asset utilization beyond Southwest Power Pool’s (SPP) security constrained economic dispatch.

**RESPONSE:** In general, WAPA believes that the references to optimization in the Argonne Analysis (e.g., p.46 and 47 of the analysis) notes the difference between the Brattle Study use of a static schedule to model the CRSP generation, compared to Argonne’s model reflecting the marketer’s ability to determine whether or not to use the CRSP generation or to purchase from the market to serve firm electric service load. Also, the Argonne Analysis utilizes GTMax Superlite to optimize the flows and releases from the large CRSP facilities. As noted in the Argonne Analysis, the GTMax – Superlite model “uses Brattle locational marginal prices (LMPs), firm electric service customer hourly loads, generation from smaller Salt Lake City Area Integrated Projects (SLCA/IP) hydropower plants and Flaming Gorge prescribed/static generation patterns projected by the first set of GTMax-Superlite runs,” to simultaneously optimize the operations of the large SLCA/IP hydropower plants.

Finally, both the Argonne Analysis and the Brattle Study focused on the hourly market. WAPA believes that there may be some additional benefit and optimization when it determines whether or not to use the CRSP facilities to serve load or purchase from the market in sub-hourly time intervals.

**SRP 8:** SRP highlighted the statement in Section 5.1 of the Recommendation Report that references “alignment with the organizational objectives of WAPA and its customers” and posed a question as to why WAPA believes that its objectives are aligned with those of its customers.

**RESPONSE:** WAPA’s primary objective, which it believes to also be a primary objective of our customers, is to provide reliable power at the lowest possible rates consistent with sound business principles. WAPA believes the status quo creates significant economic and reliability risks to the organization and its customers in an era of rapid industry change. Proactively evaluating and negotiating options provides the best position to secure an optimal future for WAPA and its customers both in terms of system reliability and economic performance. Further, pursuing market participation now, while WAPA can negotiate for a cost shift mitigation agreement and secure the federal service exemption, is the best path forward to continue to meet WAPA’s statutory obligations and provide federal power to its preference customers. The federal service exemption protects firm electric service deliveries from certain transmission cost allocation, marginal congestion charges and marginal losses. WAPA Upper Great Plains region successfully negotiated the federal service exemption when it joined Southwest Power Pool (SPP) and realized the benefits for its customers. The federal service exemption is currently a non-negotiable requirement for WAPA’s CRSP and LAP to participate in SPP. This may not be the case in future negotiations with other current or developing regional transmission organizations. There are other negotiating items that protect the



future interests of WAPA and its customers that may be similarly at risk if we defer action.

**SRP 9:** SRP questioned the economic benefits of Direct Current (DC) ties in WAPA’s Recommendation Report, stating that the entities benefiting differ between the Argonne Analysis and [Glarus DC-Tie Study](#). The commenter requested clarification regarding the values presented are for Mountain West only or if the values presented represent the economic benefit for the entire Southwest Power Pool (SPP) footprint.

**RESPONSE:** WAPA agrees that the information as presented in the Recommendation Report merits clarification and appreciates the opportunity to do so. The table below shows the breakout of the benefits between Mountain West and SPP for each of the seven DC-tie scenarios. The allocation of DC-tie benefits is available on pages 17 through 21 of the [Glarus DC-Tie Study](#), posted on WAPA’s website. For Mountain West only, the DC-tie benefits range from \$9.3 million to \$25.9 million, as shown in the table below. The production cost benefits for the Mountain West footprint estimated in the [Brattle Study](#) range from \$14 million to \$71 million. The combination of the Glarus DC-tie benefits and the Brattle Study production cost benefits produces an overall benefit range for the Mountain West participants of \$23.3 million to \$96.9 million.

Scenario	Mountain West Production Cost Savings (millions)	SPP Production Cost Savings (millions)	Total Production Cost Savings (millions)
Base Case, No DC-Tie Hurdle Rates	\$ 10.4	\$ 2.5	\$ 12.9
Low Natural Gas Prices	\$ 9.3	\$ 4.3	\$13.6
High Natural Gas Prices	\$ 25.9	\$ 2.9	\$ 28.8
Low DC-Tie Availability	\$ 10.2	\$ 1.5	\$ 11.7
Hi DC-Tie Availability	\$ 11.1	\$ 1.5	\$ 12.6
Low Energy Demand	\$ 11.3	\$ 2.9	\$ 14.2
High Energy Demand	\$ 11.5	\$ 1.7	\$ 13.2

**SRP 10:** SRP noted the WAPA Recommendation Report states that average generation from the Salt Lake City Area Integrated Projects (SLCA/IP) was 5.283 Terawatt hours (TWh) per year from 2007 to 2016, and the Argonne Analysis shows that when SLCA/IP generation is greater than 5.2 TWh annually it sees less benefit from a fully integrated day ahead market than it would a bilateral market.

Since drought conditions have prevailed during most of the past 10 years, but the SLCA/IP has still produced more than the 5.2 TWh threshold on average, SRP questioned if WAPA's own findings argue for having CRSP remain in the bilateral market as it is today.

**RESPONSE:** The Argonne Analysis shows that based on a 10-year average and looking at the adjusted production cost alone, WAPA would see approximately \$740 thousand per year more in energy costs from participating in a fully integrated market than it would in maintaining bi-lateral trade agreements. This cost stems from the fact that when CRSP is long on generation (i.e. greater than 5.2 TWh) and is selling into a fully integrated market, it is estimated that it would do so at a lower price than it would get in a bi-lateral trade agreement environment. On the other hand, when CRSP is short on generation (i.e. less than 5.2 TWh) and needs to purchase energy, it sees adjusted production cost benefits from participating in a fully integrated market because it is able to purchase energy at prices that are lower than in a bi-lateral trade agreement environment.

It should be noted that the adjusted production cost benefits are highly dependent on hydrology and, while in the past the average generation is around the break-even point, it may not be so in the future. In years that are dry, CRSP would see benefit from participating in a fully integrated market and in years that are wet it would see less benefit than it would in the current bi-lateral trade agreement environment.

Although the Argonne Analysis shows that if everything remained the same CRSP would see greater benefit from the bi-lateral trade agreement environment, the probability of status quo persisting into the future is very low. WAPA believes that given the uncertainty of the future, participating in a fully integrated market would best protect the long-term reliability and economic performance of the CRSP system.

## Tri-State Generation and Transmission Association, Inc. (Tri-State)

**Tri-State 1:** Tri-State, as a WAPA firm electric service preference customer and transmission service customer, supports WAPA's recommendation to pursue final negotiations regarding CRSP and LAP membership in SPP as a transmission-owning member and as a participant in the SPP Integrated Marketplace; consistent with CRSP's and LAP's respective statutory requirements.

**RESPONSE:** WAPA appreciates Tri-the commenter's support and agrees that membership in a regional transmission organization (RTO) must be consistent with CRSP's and LAP's statutory requirements. Therefore, the inclusion of the federal service exemption, which was originally negotiated by WAPA's Upper Great Plain region, is a non-negotiable requirement for WAPA's CRSP and LAP to become members of SPP.

**Tri-State 2:** Tri-State supports WAPA's efforts to pursue a federal service exemption for CRSP and LAP to help mitigate potential negative cost shifts to its firm electric service customers and encourages WAPA to remain focused on its statutory mission of delivering firm electric service to its preference customers at cost-based rates.

**RESPONSE:** WAPA appreciates the comment and has included the federal service exemption as a non-negotiable requirement for CRSP and LAP to participate in SPP. The primary aspects of the federal service exemption include exemptions from regional cost allocation, marginal congestion charges and marginal loss charges.

**Tri-State 3:** Tri-State supports WAPA's plan, that if successful with its respective final negotiations with Southwest Power Pool (SPP), would have CRSP and LAP each pursue a membership agreement with the SPP regional transmission organization (RTO) as a transmission-owning member, and as a participant in the SPP Integrated Marketplace.

**RESPONSE:** WAPA appreciates the commenter's support.

## Utah Associated Municipal Power Systems (UAMPS)

**UAMPS 1:** UAMPS acknowledges that WAPA has held meetings with CRSP customers to explain the recommendation to the extent allowed under the non-disclosure agreements (NDAs) with other Mountain West members and/or Southwest Power Pool (SPP), but believes that the NDAs have prevented a full discussion of the impacts that joining SPP would have on CRSP customers. The commenter believes that CRSP customers need to be presented the final terms and conditions of WAPA's participation in SPP to provide substantive and informed comments to the proposal.

**RESPONSE:** WAPA appreciates the comment and has provided the analysis behind WAPA's recommendation which is outlined and summarized in the "Recommendation to Pursue Membership in the Southwest Power Pool Regional Transmission Organization" on its website at <https://www.wapa.gov/About/keytopics/Documents/WAPA-SPP-Recommendation-Report.pdf>

Although WAPA is a party to non-disclosure agreements with Mountain West participants and SPP, and some of the proprietary data used within the analysis has not been shared publicly, the general concepts, framework, and analyses have been made public.

Negotiations are underway and a decision has not yet been made about whether or not to finalize those negotiations. If WAPA decides to proceed to final negotiations that culminate in a membership agreement with SPP for CRSP and LAP, the terms and conditions of the agreement will be public. In the meantime, WAPA will continue to share information with customers and other stakeholders as it becomes available.

In addition to WAPA's overall customer engagement and its public comment process, SPP has a formal public stakeholder process to facilitate negotiations regarding the terms and conditions of Mountain West's membership with SPP for CRSP and LAP.



Information on the SPP process, including meeting dates and supporting material, is available on SPP's website at <https://www.spp.org/mountain-west/>.

**UAMPS 2:** UAMPS understands that there are items being negotiated between WAPA's CRSP and LAP and SPP. The organization believes that these need to be resolved and that the full draft agreement needs to be given to WAPA customers before complete comments can be given to WAPA to proceed or withdraw from the negotiations.

**RESPONSE:** As noted, there are still items that are being discussed between SPP and WAPA to determine how to address certain matters, including how the federal service exemption will be applied to Western Replacement Power (WRP), Customer Displacement Power (CDP), and the Salt River Project (SRP) Exchange Agreement. WAPA will continue to engage customers as the process moves forward, and will ensure its customers are aware of the result of these negotiations when they are complete.

If WAPA decides to proceed to final negotiations that culminate in a membership agreement for CRSP and LAP with SPP, the terms and conditions will be negotiated and be available to the public under the SPP stakeholder process. In the meantime, WAPA welcomes ongoing engagement with its stakeholders and encourages feedback.

**UAMPS 3:** UAMPS commented that WAPA recently issued its new Salt Lake City Area Integrated Projects (SLCA/IP) firm electric service contracts to its customers and in those contracts the definition of Contract Rate of Delivery (CROD) includes the Western Replacement Power (WRP) and Customer Displacement Power (CDP) power programs. The commenter is interested in how the federal service exemption will be applied to the WRP/CDP products.

**RESPONSE:** WAPA intends to continue providing its customers with Western Replacement Power (WRP) and Customer Displacement Power (CDP) in accordance with the firm electric service contracts. To clarify, transmission associated with WRP and CDP allows preference customers to either request CRSP to purchase on their behalf and deliver supplemental energy up the customer's Contract Rate of Delivery (CROD) or, in the case of CDP, use available CROD capacity to deliver their own or purchased energy to their federal point of delivery. WAPA is currently negotiating with SPP to extend the federal service exemption to WRP and CDP. If successful, WRP and CDP would be exempt from marginal congestion and marginal loss charges embedded in locational marginal prices (LMP) within SPP's regional transmission organization.

**UAMPS 4:** UAMPS asked if the Argonne Analysis assumed that surplus hydropower would be sold to the market rather than provided to CRSP customers as available hydropower (AHP).

**RESPONSE:** Available hydropower (AHP) is provided to customers above the sustainable hydropower (SHP) level, when available in sufficient quantities. The Argonne Analysis recognizes that hydropower above the SHP level is available at times due to scheduling diversity and the constrained limitations of hydropower generation, such as water



release targets and ramping rate restrictions. Excess hydropower has always existed in certain hours and sometimes across multiple hours or even days. These quantities are often not substantial enough to offer as AHP and are sold to the market. Pursuant to the terms of the SLCA/IP firm electric service contracts, WAPA will continue to offer allocable AHP to CRSP customers when available rather than offering that energy to the market.

**UAMPS 5:** UAMPS suggests that WAPA provide the nature of the items that are covered under the non-disclosure agreements.

**RESPONSE:** Although WAPA is a party to non-disclosure agreements (NDAs) with Mountain West participants and Southwest Power Pool (SPP) and some of the proprietary data used within the analysis is not public, the general concepts, framework and overall analysis have been made public and are available to customers and other stakeholders on WAPA's website. The analytic approach used to inform WAPA's recommendation is described in the report titled "Recommendation to Pursue Membership in the Southwest Power Pool Regional Transmission Organization" that is available at <https://www.wapa.gov/About/keytopics/Documents/WAPA-SPP-Recommendation-Report.pdf>

## Utah Municipal Power Agency (UMPA)

**UMPA 1:** UMPA is interested in how Western Replacement Power (WRP) and Customer Displacement Power (CDP) will be managed for WAPA's firm electric service customers in Utah. These programs are valuable to the commenter. The commenter is interested in having these programs continue in Southwest Power Pool (SPP), as well as continued transparency as WAPA continues its discussions with SPP.

**RESPONSE:** WAPA acknowledges the commenter's concern with how the Western Replacement Power (WRP) and Customer Displacement Power (CDP) programs will be impacted if WAPA's CRSP ultimately decides to join SPP. WAPA understands that these programs are valuable to its customers and intends to continue providing its customers with WRP and CDP in accordance with the firm electric service contracts. WAPA is currently negotiating with SPP to extend the federal service exemption to WRP and CDP. If successful, WRP and CDP would be exempt from marginal congestion and marginal loss charges embedded in locational marginal prices (LMP) within SPP's regional transmission organization. WAPA will continue to share information with customers and other stakeholders as it becomes available, and welcomes ongoing customer engagement.

**UMPA 2:** UMPA understands that WAPA CRSP and LAP joining SPP will not initially impact the rights and interests provided under Contract 2436 between PacifiCorp and WAPA. The commenter desires these rights continue to be protected as negotiations progress.



**RESPONSE:** WAPA understands that Contract 2436 is very important to several of the CRSP customers and will work to protect the rights and interests provided in the contract as negotiations with SPP continue. Since the facilities and procedures impacted by Contract 2436 are currently outside of the market footprint, CRSP, as the commenter notes, does not anticipate any impact to this contract at this time. If WAPA decides to finalize negotiations with SPP for CRSP and LAP, and during the course of those negotiations an impact to Contract 2436 is identified, WAPA will notify any entities that may be affected.

**UMPA 3:** UMPA commented that throughout this process WAPA has maintained it will protect the firm electric service rate from any adverse impacts. UMPA appreciates those efforts and encourages WAPA to continue with that commitment to protect and maintain its obligation to those customers as a priority.

**RESPONSE:** WAPA appreciates the commenter's support. Throughout this process, WAPA has worked to minimize impacts to the firm electric service rate. Although there will certainly be changes in how WAPA CRSP and LAP operate if there is a decision to join SPP, WAPA will continue to do all it can to ensure the firm electric service rate and firm electric service customers are not adversely impacted.

**UMPA 4:** UMPA commented that membership in a regional transmission organization (RTO) is a new arena with possible unknown issues still to be addressed. It is important to the commenter that, as negotiations continue with SPP, WAPA does not expand its interests or become conflicted in meeting other utility objectives not within its defined and regulatory authority.

**RESPONSE:** WAPA acknowledges the commenter's concern about WAPA potentially expanding its actions outside of its defined regulatory authority as it continues the process of negotiating joining an RTO. However, WAPA believes that joining an RTO would alleviate the organization of supplementary activities that support its primary mission of delivering federal power to preference customers, such as balancing authority services or transmission scheduling services. This will allow WAPA to focus on providing federal power to its preference customers and to achieve the most widespread use of federal power at the lowest possible rate consistent with sound business principles.

## Western Public Power Utilities (WPPU)

**WPPU 1:** Western Public Power Utilities commented on the importance of analyzing the full array of potential costs and impacts as a result of Southwest Power Pool (SPP) expansion, including the transmission cost, energy price and loop flow impacts for regions outside of LAP and CRSP.



Western Public Power Utilities commented that an expansion of SPP should not only create a benefit to those who join SPP, but also avoid any net costs being assigned to or incurred by any individual entity as a result of such expansion.

**RESPONSE:** WAPA’s approach from the beginning has been to protect the interests of the firm electric service customers. If WAPA identifies potential adverse impacts to the firm electric service customers, it will not proceed. Although it would be impossible to study every scenario and possible cost, WAPA has analyzed many of the major cost impacts and scenarios, and believes it has been able to negotiate several key protections to avoid adverse impact to the firm electric service rate. In addition to its quantitative analyses, WAPA has given extensive consideration to the benefits regional transmission organization (RTO) membership offers in terms of protecting against risk from ongoing shifts in the electric industry. WAPA’s recommendation report, which includes the referenced analyses is available on its website:

<https://www.wapa.gov/About/keytopics/Pages/Mountain-West-process.aspx>

**WPPU 2:** Western Public Power Utilities commented that expansion of SPP should continue to avoid implementation of any mandatory capacity market and accompanying “buyer-side mitigation rules.”

**RESPONSE:** Throughout the Mountain West process and discussions with SPP, there have never been discussions of creating a capacity market. Mountain West participants, SPP and entities across the West do not intend to create a capacity market.

**WPPU 3:** Western Public Power Utilities supports a continuation of key features of the SPP governance model, including a Regional State Committee with primary responsibility for regional cost allocation, resource adequacy and congestion rights; a members committee or markets committee to provide input to the SPP Board from a diverse array of membership; and an independent board with public board meetings. As the SPP footprint expands, the commenter believe it may be time to re-examine the role of non-jurisdictional entities to state commissions as it pertains to governance structure.

**RESPONSE:** WAPA agrees and also supports key features of the SPP governance model. The SPP governance model was one of the considerations WAPA and Mountain West participants undertook when evaluating whether to enter detailed discussions and potential negotiations with SPP instead of another regional transmission organization.

**WPPU 4:** Western Public Power Utilities commented that WAPA’s participation in a regional transmission organization (RTO) should not impede any of the statutory rights of the preference customers to the federally generated hydropower, or increase the rates for such hydropower above what they would be in the absence of participation in an RTO.

**RESPONSE:** WAPA’s approach from the beginning has been to protect the interests of the firm electric service customers in evaluating RTO membership for CRSP and LAP. If



WAPA identifies potential adverse impacts to the firm electric service customers, it will not proceed.

## White Mountain Apache Tribe/Arizona Tribal Energy Association

**WMAT/ATEA 1:** The White Mountain Apache Tribe and the Arizona Tribal Energy Association are concerned with the absence of forecasted financial benefit for WAPA's CRSP customers and that the mitigation agreement has not been finalized.

**RESPONSE:** WAPA shares this concern, but believes that the mitigation agreement with the Mountain West participants provides sufficient mitigation to allow CRSP to continue to participate. The commenter accurately points out that this agreement has not been finalized. However, as noted during the forum in Phoenix, Arizona, on Nov. 9, although the agreement has not been signed, without it CRSP cannot commit to join SPP, and CRSP fully anticipates the agreement will be signed.

For WAPA, cost avoidance is a driver in CRSP's and LAP's participation in this effort. As outlined in WAPA's recommendation report WAPA anticipates that markets are coming to the West and, likely, trading partners will diminish, which would lead to higher purchase power costs to meet contractual obligations. As discussed above, through WAPA's participation in Mountain West, it has negotiated a cost shift mitigation agreement and the federal service exemption, which is the best path forward to continue to meet WAPA's statutory obligations and provide federal power to its preference customers. This may not be the case in future negotiations with other current or developing regional transmission organizations.

Additionally, WAPA anticipates that within seven years of SPP operations WAPA staff would have the experience necessary to maximize the economic benefit of the CRSP resources and congestion management rights. Also, when the seven-year mitigation period ends, CRSP will receive a percentage of point-to-point revenue that would have been previously allocated to mitigation requirements. WAPA anticipates these developments will offset the \$11 million per year in cost by the end of the mitigation period.

**WMAT/ATEA 2:** The White Mountain Apache Tribe and the Arizona Tribal Energy Association are concerned with the estimated increase in the CRSP transmission rate.

**RESPONSE:** WAPA acknowledges the concern associated with the CRSP transmission service rate. WAPA's estimates the CRSP transmission rate will increase, due mostly to the reduction in the transmission rate denominator that would occur when CRSP uses network service for its firm electric service deliveries, rather than point-to-point transmission service. It is estimated that the rate denominator will go from approximately 4,527 megawatts (MW) today to approximately 2,099 MWs in a market.



Of this approximately 2,428 MW reduction, the WAPA CRSP move to network service accounts for approximately 72.4 percent. Because this increase is driven primarily by CRSP's transition to network service for its firm electric service deliveries, this increase may occur regardless of joining a regional transmission organization. For example, if WAPA was required to use network service for its firm electric service deliveries without joining a market (i.e. if Western Electricity Coordinating Council adopted a flow gate model), this increase in transmission rate would be seen regardless of market participation.

**WMAT/A TEA 3:** The White Mountain Apache Tribe and the Arizona Tribal Energy Association requested a better analysis of the value of the federal service exemption for the CRSP customers, especially after the seven year mitigation period.

**RESPONSE:** As WAPA has presented, the federal service exemption will exempt the transactions delivering federal power to statutory load from regional cost allocation, marginal congestion charges and marginal loss charges.

When WAPA's Upper Great Plains region (UGP) analyzed joining SPP, it estimated much of its benefit from the federal service exemption would stem from its exemption from Integrated System transmission expansion costs (i.e. West and East 345-kilovolt loops in North Dakota). A summary of the UGP analysis and projected costs and benefits is available in the Alternative Operations Study on WAPA's website at <https://www.wapa.gov/regions/UGP/PowerMarketing/Documents/AOSSummary110113.pdf>. The UGP analysis also showed some additional benefit from the exemption from marginal congestion and loss charges, but on a much smaller scale.

The benefit from the federal service exemption for CRSP is harder to determine for two reasons. First, this will be a completely new market so estimating marginal congestion and marginal losses is based on modeling rather than known charges. Second, although WAPA anticipates there are times that CRSP would forego benefit from use the federal service exemption, the federal service exemption would provide protection from volatility in the market and would ensure certainty as to the costs associated with firm electric service deliveries. In a new market, where the actual marginal congestion charges and marginal loss charges are unknown, WAPA believes this certainty has significant benefit in and of itself even though it may be foregoing financial benefits in limited circumstances.

Specific to regional cost allocation, WAPA anticipates that in a market future qualifying projects could arise. There are currently no projects in the planning queue that are eligible for regional cost allocation. However, if Mountain West joins Southwest Power Pool, WAPA believes that eventually there will be projects that are eligible for regional cost allocation and that CRSP and LAP will see benefits from being exempt from these costs, similar to what was seen in UGP.

**WMAT/ATEA 4:** The White Mountain Apache Tribe and the Arizona Tribal Energy Association commented that during Southwest Power Pool’s (SPP) stakeholder process, SPP stated that its existing customers would see approximately \$200 million in benefits over 10 years from the Mountain West participants joining SPP. The commenter believes the Mountain West participants are subsidizing the benefit seen by the SPP-East members.

**RESPONSE:** As SPP highlighted on slides 28 and 29 of its stakeholder presentation (available on SPP’s website at <https://www.spp.org/mountain-west/>) on Oct. 13 in Denver, Colorado, and Oct. 16, in Little Rock, Arkansas, SPP has estimated existing members will see \$209 million in benefits during the initial 10 years of Mountain West implementation. Mountain West participants would also see significant benefit from market participation. Specifically, if the Mountain West participants realize the amount of adjusted production cost savings estimated by the Brattle Study, they would see between \$530 million and \$710 million in benefits during the 10 year period.

Of the \$209 million in benefits that SPP estimates would be realized by its existing members, \$150 million is due to reduction in administrative costs from Mountain West participants joining. As part of addressing the benefit the other parties will receive, the Mountain West participants have proposed a phase-in of the administrative fee with a 40-percent reduction in year 1; 35-percent reduction in year 2; and a 30-percent reduction in year 3.

**WMAT/ATEA 5:** The White Mountain Apache Tribe and the Arizona Tribal Energy Association commented that SPP has indicated that the Mountain West participants will be responsible for costs associated with bringing the Mountain West participants into SPP. The commenters asked what is CRSP’s estimated share of these costs, and how will WAPA pay for those costs if it become liable for them.

**RESPONSE:** During WAPA’s forum, Nov. 9, in Phoenix, Arizona, Southwest Power Pool (SPP) noted it has proposed an agreement to allow SPP to recoup costs it would necessarily incur to expand membership to the Mountain West participants in the event the Mountain West participants do not join SPP. The terms and conditions of this agreement are still being negotiated. It should be noted that if the current framework remains in the final agreement, and if CRSP were to withdraw prior to signing a membership agreement, but all of the other Mountain West participants joined, CRSP would not be subject to any additional costs. Under the current framework, costs would only be incurred in the event all of the Mountain West participants decided to not join SPP. In that case, CRSP would be responsible for a portion of the total costs SPP incurred to-date related to preparing for the Mountain West participants’ membership.

**WMAT/ATEA 6:** The White Mountain Apache Tribe and the Arizona Tribal Energy Association asked about the costs WAPA estimates CRSP would incur should it elect to withdraw from Mountain West after joining.

**RESPONSE:** During WAPA’s forum in Phoenix, Arizona, Nov. 9, SPP spoke about the difficulty of estimating exit costs. Exit costs would be based on the member’s unpaid obligations and its share of SPP’s financial obligations outstanding as of the termination date. Although the exact cost is hard to predict, WAPA’s CRSP would be subject to an allocation of SPP’s costs that are calculated according to the SPP Bylaws. See SPP’s Bylaws, First Revised Volume No. 4, Section 8.7, Financial Obligation of Withdrawing Members on SPP’s website at <https://www.spp.org/documents/13272/current%20bylaws%20and%20membership%20agreement%20tariff.pdf>

**WMAT/ATEA 7:** The White Mountain Apache Tribe and the Arizona Tribal Energy Association would have liked to review more detail of the process to select SPP over California Independent System Operator (CAISO) or any other possibilities.

**RESPONSE:** In 2016, Mountain West decided to pursue membership in an existing regional transmission organization (RTO) rather than create a new one. The efficiencies gained from joining an existing RTO outweighed the costs and complexity of standing up a new RTO. Mountain West issued a Request for Information for an RTO delivered to four RTOs: the California Independent System Operator (CAISO), the Mid-Continent Independent System Operator (MISO), PJM Interconnection (PJM), and the Southwest Power Pool (SPP) RTO. As part of the process, WAPA created a committee of CRSP, LAP and Headquarters representatives to evaluate the four possible proposals.

The group performed a pairwise matrix analysis of CAISO, MISO, PJM and SPP proposals. SPP was selected by WAPA as the best initial choice by the committee using qualitative and quantitative factors of consideration. SPP was later chosen as best initial choice by the entire Mountain West. In January 2017, the group decided to pursue informal discussions with SPP for the following reasons:

- Adjacent market connected by direct current (DC) ties had potential market efficiency benefits.
- WAPA, Tri-State, Basin Electric and Xcel already had transmission assets, generation assets and load within the SPP footprint in the Eastern Interconnection.
- The stakeholder-driven governance model of SPP was preferred.
- SPP’s proven ability to onboard new participants.
- Presence and satisfaction of non-jurisdictional entities in SPP.

**WMAT/ATEA 8:** The White Mountain Apache Tribe and the Arizona Tribal Energy Association request that CRSP provide any other cost/benefit detail available but not yet provided.

**RESPONSE:** WAPA prepared a report titled “Recommendation to Pursue Membership in the Southwest Power Pool Regional Transmission Organization” that was made available on Oct. 12, 2017. This report discusses all cost and benefit studies that WAPA is using to



inform its decision. All studies referred to in this report are available on WAPA's website at <https://www.wapa.gov/About/keytopics/Pages/Mountain-West-process.aspx>.

**WMAT/ATEA 9:** The White Mountain Apache Tribe and the Arizona Tribal Energy Association request additional customer dialogue prior to any decision by CRSP on Mountain West participation.

**RESPONSE:** WAPA is willing to meet with any customer that would like more information and further discussion about the process.

