

**Western Area Power Administration's  
Operations Consolidation and Balancing Authority  
Consolidation Proposals:**

**Response to Comments**

April 11, 2008

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## **II. Introductory Remarks**

Western Area Power Administration (Western), as part of its informal public process for the Operations Consolidation and Balancing Area Consolidation proposals, is responding to the comments received from interested parties. Western expresses its gratitude to the numerous customers, potential customers, and interested parties who have participated in this process. Western thanks all the parties who submitted comments. The insightful and thoughtful comments have provided Western with valuable input into the process.

As we reviewed the comments, we believed it was important to offer some clarification to resolve some apparent confusion regarding Western's proposals. As a result, Western is including these introductory remarks to clarify Western's proposals. In addition to clarifying the proposals, Western is also updating the schedule and providing updated cost information in these introductory remarks, based on the comments.

### **A. Clarification of Proposals**

Apart from maintaining the existing operational structure, Western is proposing two primary alternatives: (1) operations consolidation and (2) balancing authority consolidation. Western will explain each of these in more detail below.

#### **Existing Operations (Options A and B)**

Western operates three Balancing Authorities (BA) from three separate operations centers within the Western Electricity Coordinating Council (WECC) footprint. The centers are located in Watertown, SD (Western Area Upper Great Plains-West, or WAUW); Loveland, Colo. (Western Area Colorado/Missouri, or WACM) and Phoenix, Ariz. (Western Area Lower Colorado, or WALC). These three operations centers are each required to maintain tools, policies, procedures and Alternate Control Centers (ACC) to meet North American Electric Reliability Corporation (NERC), WECC and Federal Energy Regulatory Commission (FERC) standards and requirements. Each office staffs similar functions in order to accomplish this. High level organization charts for Loveland and Phoenix are included as [Attachment C](#). As part of this process, Western is examining two options under existing operations: (Option A) maintaining the status quo and (Option B) maintaining the status quo but taking into account additional staffing needed to ensure continued regulatory compliance. Due to the regulatory changes, Option A above is used to provide a benchmark while Option B is a more realistic assumption of future costs to ensure continued reliable operations consistent with evolving industry standards, regulations and workload.

#### **Operations Consolidation Proposal (Option C)**

Under Option C, Western proposes to consolidate the Rocky Mountain Region's (RMR) WACM and the Desert Southwest Region's (DSW) WALC operations under a single senior manager. The Upper Great Plains Region's (UGP) WAUW operations are not proposed to be consolidated under this option. Benefits would include the reduction of resources to develop and maintain the operations systems and minimize the resources required to maintain NERC and WECC standards along with a reduction in the number of required audits and assessments. This proposal would also eliminate the requirement for maintaining the two existing ACCs, at Coolidge (for DSW) and Cheyenne (for RMR).

Option C, operation consolidation would consolidate the operations of these two offices under the direction of the RMR Regional Manager and would maintain staff in both Phoenix and Loveland. A high level organization chart for this proposal is included as [Attachment C](#). It is envisioned that the dispatch functions would be operated from both the Loveland and Phoenix operations centers. The number of dispatch desks under this proposal will be reduced from 10 present desks (five desks at each office) to nine desks with five desks located in Loveland and four desks located in Phoenix. The communication and System Control and Data Acquisition System (SCADA) would be upgraded so that the entire system can be operated from either facility, eliminating the need for the existing ACCs. This option would leave in place the existing WACM and WALC BAs. The balancing workload would be combined and the existing Automatic Generation Control (AGC) functions would be performed from the Loveland office. Transmission Operation or Switching would be performed from Loveland (for the North system) and Phoenix (for the South system). The Transmission Services function from both offices would be combined into a single organization with staff located in both RMR and DSW and would include a representative from the CRSP transmission system. Real-time transmission marketing on the Open Access Same-time Information System (OASIS) for both WACM and WALC OASIS nodes would be performed from Phoenix with support staff at both Loveland and Phoenix. It is not proposed to combine the transmission rates into a single rate. Transmission planning would also be maintained in both locations, but would be overseen by a single manager. Real-time transmission scheduling and BA checkout for both WALC and WACM would be performed from the Loveland office. Pre-scheduling would be performed from both Loveland and Phoenix as it is today. Settlements for transmission services and ancillary services would remain with each existing organization. WALC and WACM would use one Supervisory Control and Data Acquisition (SCADA) system and one set of common tools, such as scheduling software, outage report, dispatch logbook, and data archiving.

#### **Balancing Authority Consolidation Proposal (Option D)**

Under Option D, Western would include all aspects of the Operations Consolidation proposal listed above, and would also include the consolidation of the WAUW, WACM and WALC BAs into a single BA. Increased efficiencies, such as the reduction of regulation requirements, could be realized by the diverse loads and resources of this larger BA. In addition, transmission marketing for WACM and WALC would be performed under one OASIS node. Again, it is not proposed to combine the project transmission rates into a single rate. If Western pursues this option, Western would initiate a public process to establish common ancillary service rates. Settlements would also be centralized under this proposal.

#### **B. Updated Cost Savings**

Since the customer meetings held on Feb. 12 and 14, 2008, Western has examined more closely the cost requirements for all the options. The primary purpose of the additional evaluation and analyses was to provide additional information as requested by the customers and interested parties. This thorough examination revealed that in some instances the previous estimates failed to include some costs and savings. The previous estimates were a short-term incremental analysis and failed to review SCADA costs over a 10-year period. When Western reviewed the 10- year average SCADA costs, the examination determined there would be significant savings due to reduced licensing and hardware costs. In addition, Western re-examined the

communication estimates over a 10-year period. As part of the examination, it became apparent the cost to maintain the existing communication system was not included in the FY 09 10-year work plans that RMR, CRSP and DSW provided to their customers. Western has included the results of these examinations and analyses in [Attachment D](#)—including the “Operations Consolidation Cost Evaluation Spreadsheet” (OCCES) and other detailed spreadsheets.

Table 1:  
**Updated Cost Summary**

<b>Options</b>	<b>Assumptions</b>	<b>FTE*</b>	<b>Total of Annualized Cost Changes Compared to Option B (in millions)</b>
<b>Option A: Existing Structure</b>	3- BAs, 5-Desks DSW, 5-Desks RMR	148.1	-\$1.8
	FTE delta from Option B	-14.0	
<b>Option B: Existing Plus Regulatory Staff</b>	3-BAs, 5-Desks DSW, 5-Desks RMR, (additional FTE for regulatory compliance)	162.1	\$0.0
	FTE baseline	0.0	
<b>Option C: RMR, DSW Back Each Other Up (Operations Consolidation)</b>	3-BAs, 4-Desks DSW, 5-Desks RMR, Common Tools, Common SCADA, Settlements remains in FPP, Operations Reorganization under a single senior manager	158.5	-\$2.1
	FTE delta from Option B	-3.6	
<b>Option D: RMR and DSW Consolidated (BA Consolidation)</b>	1-BA, 4-Desks DSW, 5-Desks RMR, Settlements moves to Operations, Operations Reorganization under a single senior manager.	154	-\$2.5
	FTE delta from Option B	-8.1	

\*Note: FTE is an acronym for Full-time equivalent.

### **C. Updated Schedule**

As a result of public input and as previously noticed, Western has adjusted the timeline as follows:

March 16, 2008—Public submitted comments and questions to Western;

April 11, 2008—Western posts responses;

April 24, 2008—Informational meeting in Denver, Colo.

At the informational meeting, Western will announce which option (status quo, operations consolidation, or BA consolidation) it will pursue further.

### **III. Comments and Responses**

#### **A. Timeline**

##### **Comment**

Western received numerous requests to extend the timeline and to explain the process Western will use to make its decision.

##### **Response**

As a result of public input, Western has adjusted the timeline as follows: the public submitted comments and questions to Western by March 16; Western provided responses by April 11; and the next informational meeting will be on April 24 in Denver. Western will announce which option (maintain status quo, operations consolidation or BA consolidation) it will further pursue during the April 24 meeting, and explain the next steps to be taken.

#### **B. Administrative Procedure Act**

##### **Comment**

Western received a comment asking under what rules and guidelines Western will proceed with the decision-making process for the operations and BA consolidation proposals, and is it consistent with the Administrative Procedure Act.

##### **Response**

The operations consolidation proposal is a reorganization related to agency management and personnel and, other than this current informal process, Western will not hold a separate notice and comment process. To ensure full public participation, if Western decides to pursue the BA consolidation proposal, Western will conduct a public process including providing notice in the *Federal Register* and an opportunity to comment consistent with the Administrative Procedure Act.

##### **Comment**

Western received a question asking if Western reviewed the legal aspects of its proposed consolidation plan.

##### **Response**

The proposals are consistent with Western's legal requirements. Western will continue to comply with all applicable legal and regulatory requirements associated with the consolidation proposals. Reclamation laws provide Western with broad discretion to take actions necessary and proper to carry out its mission.

#### **C. Customer Involvement**

##### **Comment**

Several customers have suggested Western include the customers in developing the proposal and analyzing the impacts.

##### **Response**

Western will work with interested parties during the process. Western believes it is important to provide all interested parties with an opportunity to provide input. This was the purpose of the February meetings, the review and response to customers' written comments, and will be the purpose of the upcoming April 24 customer meeting. Also, if Western decides to pursue the BA consolidation proposal, it will conduct a public process, including providing notice in the *Federal Register* and an opportunity to comment consistent with the Administrative Procedure Act.

**Comment**

Bureau of Reclamation (Reclamation) wants to ensure it thoroughly understands the proposal. Reclamation comments that Western should work closely with it.

**Response**

Western will work closely with Reclamation to ensure the proposal addresses Reclamation's concerns.

**Comment**

Western received several comments stating Western needs to ensure the customers fully understand the proposal before Western moves forward.

**Response**

Western will continue to work with interested parties by holding meetings and providing responses to questions and comments. To ensure full public participation, if Western decides to pursue the BA consolidation proposal, Western will conduct a public process, including providing notice in the *Federal Register* and an opportunity to comment consistent with the Administrative Procedure Act.

**Comment**

Western received comments stating that Western did not involve the customers early in the process and that Western is disregarding issues that are sensitive to the customers. The commenter states the presentation lacked substance, necessary studies, and the proposals take away long-established customer relationships.

**Response**

Western presented the idea to interested parties as soon as a draft proposal was available. If Western had held meetings sooner, there would not have been a proposal to discuss—there only would have been verbal ideas. Even with the proposal presented, many interested parties have asked for additional details that are not available because it is so early in the development process. In the event Western proceeds with BA consolidation, Western will work with interested parties by holding meetings, addressing questions and comments, and providing documentation when possible.

**Comment**

A customer requested a high-level outline of the decision-making process and an indication of parameters that will be used to make the decisions, such as the importance of cost factors, compliance issues, full-time equivalent (FTE) levels, rate proposals, etc.

**Response**

Western will announce the direction (e.g., no action, operations consolidation, or BA consolidation) during the April 24 meeting. Western will have additional meetings with interested parties if Western decides to pursue BA consolidation. Both the costs savings and more efficient use of staff will be important decision factors. Western operates its transmission system consistent with today's regulatory environment, and will continue to meet or exceed the reliability standards in the future. Western will reliably operate the Federal system in the most efficient and cost effective manner possible.

**Comment**

A commenter raised a question regarding section A.4 of the Operations Consolidation Report, prepared Dec. 14, 2007. The commenter asked whether customers are considered “Key Stakeholders.”

**Response**

As part of the report, Western used a phrase “Key Stakeholders.” The report was an internal, pre-decisional document for an internal process and the reference to “Key Stakeholders” in that report referred to Western personnel. Customers and other interested parties are “Key Stakeholders” in this process.

**Comment**

Western received several comments requesting Western consider the internal costs each customer will incur as a result of the operations consolidation and their expected need to travel to RMR for operations related issues.

**Response**

In general, Western is unable to analyze internal cost impacts to each interested party as each interested party does business differently. However, as it relates to additional travel requirements, the presence in DSW will be very similar to what it is today, as is detailed in the introduction.

**D. Merchant Consolidation****Comment**

Western received numerous comments and questions related to the merchant consolidation. The commenters state the costs for the merchant functions are paid for by the customers and it is unnecessary to change it.

**Response**

While merchant consolidation is not part of these proposals, it was part of Western’s strategic planning process. Western has performed a high level review of the issues surrounding a merchant consolidation and has determined that Western will not pursue merchant consolidation as part of the strategic planning initiative.

**E. RMR as the Primary Operations Center****Comment**

Several commenters asked why RMR was chosen over DSW to be the primary operations center and whether Western considered other locations.

**Response**

The technical evaluation of both operations centers showed either center would be successful as the primary center. This is a testament to the excellent work both centers perform and the outstanding reputation both centers have in the industry. Western selected RMR as a result of the experience gained as host of the Rocky Mountain Desert Southwest Reliability Center (RDRC) including the demonstration of operating Interconnection wide systems such as the WECCNET and the EHV Data Pool. As the RDRC host, RMR already has established communication links to all BAs in the west, developed a power system model for most of WECC, and has an operational Advanced Applications system with State Estimation and Contingency Analysis including the day-ahead modeling of forecasted load and generation.

**Comment**

A commenter asked to see an option for creating the single BA/operations center in Phoenix versus Loveland. The commenter asked to see the background material on the Loveland selection to determine if there are increased financial advantages of one location over the other.

**Response**

As discussed, a brief analysis of DSW and RMR shows little difference in costs between the existing operational configuration and the proposed operations and BA consolidation configurations. There are minor staffing differences between the existing structure and the proposed structures. Due to Federal locality pay, there is a pay difference between what RMR and DSW pay their General Schedule (GS) employees. GS employees include all non-dispatch and non-Wage Board (craft) employees. RMR's pay for GS employees is 6.8 percent higher than DSW's pay. The dispatchers are paid the same in DSW and RMR. Because the staffing levels are very close between Options C and D, there is little cost difference.

**Comment**

Several commenters stated from a customer standpoint, DSW is much easier to visit than RMR.

**Response**

Both the operations and BA consolidation proposals result in transmission operations and service staff remaining in DSW and RMR. Customers that normally do business at DSW will be able to continue doing their business at DSW. Likewise, customers that normally do business at RMR will be able to continue doing their business at RMR.

**Comment**

A commenter stated the Phoenix office is accessible 365 days per year. What is the accessibility of the Loveland office, for both Western's employees and customers?

**Response**

As Federal offices, RMR and DSW have similar access policies and procedures. Weather is unpredictable in most areas of the country. Generally, as it relates to the differences between Loveland, Colo., and Phoenix, Ariz., Western expects weather-related impacts to have little effect on accessibility.

**Comment**

A commenter asked whether there is a safety concern because all the dispatching will be done in RMR.

**Response**

As discussed in the introduction, the operations and BA consolidation proposals leave the majority of the DSW dispatch staff in place. DSW's dispatch function would only change by one dispatch desk. Presently, both RMR and DSW have five dispatch desks. The proposals have five desks in RMR and four desks in DSW, and DSW will still have dispatch supervisors and engineering staff support. A DSW dispatch desk would still direct switching for DSW and a RMR dispatch desk would direct switching for RMR. Overall, there will be very little change in the staffing function. The main change with operations or BA consolidation is the management reporting structure.

**Comment**

Several commenters raised concerns that customer service will be adversely impacted in DSW.

**Response**

Western believes face-to-face communications is important and it does not intend to diminish customer service. As detailed in the introduction, Western's proposals have only a very minor change in staffing for DSW and leaves significant staffing in DSW to be available for customer interactions. Under operations and BA consolidation, the changes occur in the management structure where the operations personnel in RMR and DSW both report to the RMR Regional Manager.

**Comment**

A commenter stated that both DSW and RMR have complex systems and a number of projects in their systems that require extensive accounting processes. Based on the above, the commenter asked whether Western evaluated how these large complex systems can be consolidated.

**Response**

The project team included technical and management employees from WAUW, WACM, WALC and the CRSP MC. Certain team members are experienced in the accounting complexities, existing practices and operational tools used in the different regions. The team felt these complexities and the unique characteristics would be accommodated with the operations consolidation proposal. BA consolidation would result, to the extent practicable, in efforts to standardize practices within the BA footprint.

**F. Efficiencies****Comment**

Several commenters asked whether there are advantages of operating a larger BA.

**Response**

Western believes there will be benefits in the future as the regulatory agencies increase demands on the electric utility industry. Other efficiencies include the use of common tools, operational benefits such as fewer reports to regulatory agencies, fewer NERC and WECC audits, decrease in the number of dispatch desks from 10 to nine, the reduction of two ACCs—eliminating duplicate activities between the existing BAs—and freeing up personnel presently performing these tasks to focus on other operations activities.

**Comment**

A commenter asked how consolidation will play out in the bigger picture of the utility industry.

**Response**

The operations consolidation proposal is meant to make Western more efficient and better able to meet rapidly evolving electric utility industry standards and regulatory requirements. An additional benefit discussed elsewhere is that the BA consolidation has the potential to standardize protocols over a wider geographic area. It reduces duplicative reporting requirements, such as both RMR and DSW submitting reports to WECC, NERC or FERC. Aligning operations under a single senior manager also allows for a more effective decision-making process regarding operations issues and policies.

**Comment**

Several commenters expressed concerns that there would be little or no cost savings associated with consolidation. Given the limited cost savings weighed against the potential impacts to program operations, these commenters questioned the value of proceeding forward with the proposal, or expressed a concern that Western conduct further studies. Other commenters stated the cost differential and/or savings are very marginal because \$600,000 can disappear quickly when shared between two regions.

**Response**

The comment refers to slide 20 of the February 2008 presentation. Western has performed additional financial analyses resulting in more accurate cost and savings estimates between the options. Western describes the new analyses in [Section B](#) and [OCCES \(Attachment D\)](#). In summary, Option C now shows an annual savings of \$2.1 million compared to Option B; and Option D shows an annual savings of \$2.5 million compared to Option B. Western understands some customers do not believe the savings are sufficient to justify the changes proposed, but Western believes the analysis has a very conservative estimate for the proposed structure and does not take into account the additional avoided future costs that would be realized by running a more efficient organization. Western believes operations or BA consolidation will allow for more consistent Open Access Transmission Tariff (OATT) administration and operational practices throughout Western. Western believes that there will be additional financial benefits in the future as the regulatory agencies increase demands on the electric utility industry. Other efficiencies include the use of common tools, operational benefits such as fewer reports to regulatory agencies, fewer NERC and WECC audits, decrease in the number of dispatch desks from 10 to nine, the reduction of two ACCs—eliminating duplicate activities between the existing BAs—and freeing up personnel presently performing these tasks to focus on other operations activities. Western addresses the request for studies below in [Section M](#) and [OCCES \(Attachment D\)](#).

**Comment**

A commenter stated that the proposals should address whether there are reliability benefits and increased speed of responses.

**Response**

Under both the operations and the BA consolidation proposals, having a staffed 24/7 ACC will increase reliability benefits and provide a quicker response than the current unstaffed ACCs.

**Comment**

A commenter stated that NERC and FERC are requiring increased documentation and specificity in planning of workloads and completions. The commenter asked if there is a detailed analysis to determine if consolidation will create any added workload.

**Response**

As shown in [Section B](#) and [OCCES \(Attachment D\)](#), Western expects the operations and BA consolidations to result in fewer FTE than if Western fully staffed to meet all of the present and future regulatory requirements. Both regions are expected to meet all NERC and FERC requirements and by developing common procedures and using common tools, will do so more efficiently.

**Comment**

A commenter asked whether Western has made a comparison of pre- and post-consolidation work in each region, and how any apparent differences would affect the efficiency of regional operations.

**Response**

Western has made a comparison of operations both pre- and post-consolidation. Western provided these comparisons at the public meetings in February 2008. On page 19 of the handout, Western discussed: Option A: Existing Structure; Option B: Existing Plus Regulatory Staff; Option C: RMR, DSW Back Each Other Up (Operations Consolidation); and Option D: RMR & DSW Consolidated (BA Consolidation). Western designed its proposals to obtain greater efficiencies by consolidating staff and/or functions.

**Comment**

A commenter stated that it has load or generation in five BAs, and generally supports fewer and larger BAs. Unfortunately, the proposed BA consolidation would not result in any efficiency for this commenter since it would still be in five BAs. The transmission system that links the three Western BAs under discussion is minimal and little operational enhancement seems possible without significant investment in infrastructure. In addition, the multiple Federal projects, each with its own authorizing legislation, would require a blending of the existing rates and inevitably result in cost shifts among the existing customers. Significant benefits would have to be identified to overcome the negative impacts of the consolidation and provide a net gain to the customers.

**Response**

Comment noted.

**Comment**

A commenter stated that it is apparent that more than one BA can be run from Option D. If more than one BA can be run from Option D, while keeping the BA in WALC whole, with little or no additional personnel, then the commenter supported Option D. The commenter stated it supported the idea of single reporting structure to the entities of FERC, NERC, WECC, but did not support unilateral business practice changes within the projects or BAs.

**Response**

Option C, accomplishes what the commenter suggests. The operations consolidation proposal provides for running the two existing WALC and WACM BAs, while consolidating SCADA systems, consolidating reporting requirements, and moving to common tools, for both BAs under one senior manager.

**G. Technical Operations****Comment**

A commenter asked for more details on how Western will operate its primary and backup facilities, running a single Energy Management System, etc.

**Response**

Since the existing WACM and WALC operations centers will have both primary and backup responsibilities under operations or BA consolidation, Western refers to them as North (RMR) and South (DSW) rather than primary and backup. The specific details of the IT architecture

have not been designed at this time. However, Western has developed the following high level system requirements:

1. DSW must be able to take over operations from RMR within one hour, and vice versa.
2. Communications to Remote Terminal Units across the BA(s) must be continuously and independently available at both RMR and DSW.
3. Critical systems at both RMR and DSW must remain synchronized.
4. Both RMR and DSW will have common tools.
5. IT systems (critical and essential systems) need to be accessible from both RMR and DSW.
6. Availability, integrity, and confidentiality of critical and essential systems must be maintained at current levels or better.
7. The proposed solution will meet all NERC, WECC, and FERC requirements.

### **Comment**

A commenter asked how Western proposes running a single BA with multiple reserve sharing groups.

### **Response**

Currently WALC and WACM are members of multiple reserve sharing groups. Western has not developed a proposed method to operate a single BA in the various reserve sharing groups but intends to analyze alternatives. Until an analysis is complete, Western would continue to operate in the separate reserve sharing groups.

### **Comment**

A commenter raised concerns about one BA and wanted to see more detail from Western as this process continues.

### **Response**

Should Western pursue BA consolidation, Western will share details with interested parties as they are developed.

### **Comment**

Western received a comment stating coordination of Transmission Service Provider (TSP) function seems to be the driving force behind this. If that is the case, and it takes dedicated transmission between DSW and RMR, where there is little available, how would the BA perform its functions and meet current loads?

### **Response**

Consolidation of the TSP function is one of the items Western considered as part of the operations and BA consolidation proposals, but it is not the driving force. While consolidation of the TSP functions has many advantages, it does not alleviate transmission congestion or shortages. At the same time, it is not anticipated that dedicated transmission is needed between DSW and RMR beyond what Western currently owns for this proposal to work.

To cite an example of potential benefit, it should be noted that today CRSP is managing two sets of “bubbles” for balancing its obligations in the DSW and RMR regions. Almost every hour a transaction (schedule) is needed between these two separate systems to assure CRSP is balanced in both BAs, thus avoiding energy imbalance charges. BA consolidation would eliminate the need to schedule power back and forth between the two systems for this reason.

Consolidation of TSP functions will allow Western to maintain only one OASIS site, have one set of Business Practices, have a consistent methodology for calculating Available Transfer Capability (ATC), and all other issues related to marketing its transmission and ancillary services.

**Comment**

A commenter asked how Western plans to handle the TSP function.

**Response**

Consolidation of the TSP function including transmission planning, tariff management, and settlements under a single senior manager is still a part of Western's operations and BA consolidation proposals. While it is envisioned that Transmission Services would report to the same senior manager as Transmission Operations, most of the functions mentioned above would remain distributed throughout the RMR and DSW Regional offices to provide support for regional and sub-regional transmission planning activities and customer services relative to transmission interconnection and transmission service requests.

One of the factors in the recommendation of operation consolidation is to take advantage of administrating Western's OATT. Presently, RMR and DSW perform the work associated with this requirement resulting in a duplication of effort.

**Comment**

A commenter stated it would like to see the details of the direct current (DC) tie operation.

**Response**

There will be no change in the way Western operates the DC tie. If the commenter is referring to how Western would address the "high line," i.e., the line going west out of Fort Peck, there are no Western or Integrated System facilities that tie this line to the rest of the Western facilities in WAUW. Western currently purchases transmission from NorthWestern to allow flows between the "high line" and Western's other facilities.

**Comment**

A commenter stated much of the generation and the load in WALC are dynamically scheduled into other BAs, and are under their control, with signals passed to WALC and WACM. How much of the load/substations referenced in the presentation on Feb. 12 are actually no longer in WALC and WACM at this time?

**Response**

The substations and loads identified in the Feb. 12 presentation are contained within the WALC and WACM BAs. Both regions have loads that are dynamically scheduled into and out of their BAs. Loads dynamically scheduled out of a BA were not included.

**Comment**

A commenter stated the proposed structure does not lend itself well to a centralized BA because of the geographically diverse nature of the service territories, the limited transmission capacity connecting the regions, and the diverse nature of the Federal project contracts involved. Another commenter stated combining BA functions implies that energy is flowing back and forth from one area to another, which takes dedicated transmission to make it work. Currently there is little or no available transmission capacity linking RMR to DSW. How will a combined BA perform its required functions without using transmission that is currently being used by Western's customers for delivery of Project resources? Will transmission that is currently dedicated to delivering Project generation be reassigned to the consolidated BA functions?

**Response**

The BA consolidation proposal takes into account the existing transmission constraints at the points of interconnection between DSW and RMR. The proposal identifies that Western will provide or procure ancillary services consistent with the recognition of these constraints. In other words, Western will continue to provide or procure ancillary services consistent with the existing regional configurations. It will not require Western to withdraw any transmission capacity used to deliver project generation.

**Comment**

A commenter asked whether there are power-flow and voltage-stability studies available for review that demonstrate, after consolidation, that the resulting, much larger BA has sufficient transmission to remain viable in the event of either an N-1 or N-2 generation outage. If a cascading outage occurs on Colorado's Front Range or on key TOT facilities, would WALC remain "whole?" Where are the under-voltage and under-frequency relays located in the north-to-south system of transmission lines?

**Response**

As stated previously, under a consolidated BA, Western would continue to take into account the existing transmission constraints and will provide or procure ancillary services consistent with the recognition of these constraints. The BA consolidation will not impact the reliability of the transmission system as a result of existing N-1 or N-2 generation and transmission outages. Western will not violate NERC or WECC standards.

**Comment**

A commenter states DSW has several Independent Power Producers (IPP) attached to its system, and has established means to serve them. Will the IPPs be asked to provide energy and voltage support to the greater Control Area? VARs don't travel well, so how will assured voltage be established for the larger BA?

**Response**

As stated, voltage support is inherently local and it is anticipated that the system would operate as it does today under either operations or BA consolidation.

**Comment**

A commenter stated while the BA consolidation proposal seems on the surface to reduce costs and allow for more ancillary resource sharing between areas, this can only be done if there is available transmission capacity to transfer such resources between BA. Such existing constraints as TOT 2A, TOT 3 and TOT 5 would likely limit the true operational benefit of any “paper analysis” of such resource options. This should be carefully considered.

**Response**

Western agrees that transmission capacity issues need to be considered for various ancillary services. Western would operate the system similar to how it is today, with ancillary services being provided on both sides of the constraints. Western’s BA consolidation proposal shows a reduction in regulation requirements by operating one BA, but it does not show a reduction in reserves.

**Comment**

Western received a question asking if Western has considered discussion with an outside consultant and/or companies who have done something similar recently advising on SCADA work. This is a significant undertaking and CRSP has been assigned significant SCADA costs over the years.

**Response**

Western had discussions with outside consultants regarding the proposed SCADA changes. Western will utilize outside consultants/companies when they can provide a cost beneficial service. Since Western is combining, not changing, its current Energy Management System (EMS) vendor systems, there is significant expertise within Western to accomplish the proposed system consolidation.

**Comment**

A commenter asked Western to describe its plan for ACCs.

**Response**

Both DSW and RMR have control centers and ACCs. Options C and D would eliminate the need for the two ACCs by building infrastructure that allows the DSW and RMR control centers to operate the entire system thereby acting as ACCs for each other.

**Comment**

Several commenters asked whether these proposals conflict with existing contracts.

**Response**

Western performed an initial review and does not believe the proposals conflict with any existing contracts. Western will honor all existing contracts.

**Comment**

A commenter asked whether the main purpose of the proposal is to fully implement the separation required by FERC Order No. 888.

**Response**

The purpose of these proposals is not related to separation of functions but to establish a single Western operations organization (Transmission Operations and Transmission Services) within the WECC under the direction of a single Western senior manager. Establishing a consolidated operations organization under operations or BA consolidation essentially involves

reorganization, assigning the operations responsibilities and the people performing these functions to a single senior manager. Western believes that moving this function under a single senior manager will serve to increase the effectiveness of Western's response to an extremely dynamic electric utility industry, particularly as it relates to reliability standards, transmission service regulations including tariff interpretation, implementation and compliance. Given that the consolidated operations organization will remain distributed within the regions essentially as it is today, little or no relocation of existing personnel will be required. Western believes that retaining planning, tariff and associated customer service expertise within the regions is essential to facilitate effective participation in sub-regional and local transmission planning activities as well as to continue providing the level of customer service needed by customers regarding their requests for transmission interconnection and transmission service. Neither operations nor BA consolidation includes the creation of a separate contracts staff. Rather, the proposal anticipates utilizing existing contracts expertise.

**Comment**

A commenter asked if Western goes to hourly financial settlements does that mean Western will have less energy coming back into the BA to use for marketing or for other uses. Right now, DSW is using some of the energy that comes back that is not in the deviation.

**Response**

Under the BA consolidation proposal, the details of the settlement process will be developed through Western's public rate process.

**Comment**

Western received a comment stating that customers in DSW have learned to work with, live with, and are accustomed to and has a preference for WALC settlement methodologies. It does not cost Western, does not jeopardize Western, and Western has not presented any reasons or rationale based on any facts and circumstances that require us to abandon it. We want Western to fight to keep them as they are.

**Response**

Comment noted.

**Comment**

A commenter stated the Western presentation either implies a) that Western has made a decision to abandon the existing DSW methods or b) there is a purposeful deception being practiced to get customers to believe that FERC will require only such settlement parameters as Western is deceptively describing. Customers' reading of FERC Order No. 890 indicates flexibility and opportunities for local or existing conditions. Western has not filed anything and yet it would have the customers believe the outcome is clear and that there is no flexibility. The presentation and presenters appear to indicate that DSW must give up local practices to our economic disadvantage. Western is committing us and itself to a process and organization before Western's filing. As a result, DSW customers are very concerned with Western's next FERC filing and would like to request extensive involvement.

**Response**

Western has chartered a team to prepare Western's Order No. 890 compliance filing. Western's Order No. 890 process is outside the scope of this proceeding. As part of Western's

implementation of FERC Order Nos. 890 and 890A, Western will involve the public in a separate process.

**Comment**

A commenter stated it is concerned about the consolidation proposals as they may affect energy banking functions. The commenter is unalterably and firmly opposed to any increased costs in the structure and management of energy banking relationships. Energy banks provide for the storage of energy surpluses in monetary form to be drawn out later when shortages are experienced. The commenter is very concerned that the BA consolidation process will cause changes to these existing arrangements. The DSW/WALC implementation of energy banks pertain to energy stored on behalf of the current BA which provides these areas with the ability to purchase regulation, energy or spinning reserves to help fulfill its regulatory requirements. The current practices of customers that exchange benefits includes the use of energy banks without having to monetize or provide financial revenues whereby in the DSW we get and provide regulation services. The commenter is concerned that the result may not maintain the existing economies and flexibilities of the functions currently existing in the DSW. How will energy banks and banking be accomplished and what studies have been done on merging? Our energy banks accommodate regional and customer distinctions. What studies have been done indicating that distinctions will be maintained and accommodated for the benefit of us in the DSW?

**Response**

The operations consolidation proposal will not affect energy banking. Under the BA consolidation proposal, Western would standardize energy deviations between the regions. Western would continue to honor existing contracts. To the extent Western's existing contracts allow for energy banking, such contracts would continue to be honored. Under the BA consolidation proposal, energy imbalance procedures and rates would be determined in a separate public rate process.

**Comment**

A commenter stated it is concerned about the costs due and attributed to new or different methods for accounting for deviation, transmission losses and energy imbalances. What studies and analyses have been conducted on the unique relationship between Hoover and Parker-Davis with respect to minimizing the impact of deviations and purchases for firming and the flexibility that now exists by pooling those resources for customer benefit?

- a. How would a consolidated BA collect for transmission losses and energy imbalance?
- b. If those collections would continue to be in the form of energy, which office will be in charge of managing assets?
- c. What affect would the end of energy attributable to the BA being pooled with Firm Electric Service (FES) resources have on future purchase strategies?
- d. What are the possible rate impacts to FES customers as a result?

**Response**

Western has not performed studies regarding the relationship of Hoover and Parker-Davis under the BA consolidation proposal. However, Western would implement BA consolidation consistent with existing laws, marketing plans and contracts. Western is not proposing to change the transmission losses, the transmission rate, or calculation as part of the operations or BA

consolidation proposals. Under the BA consolidation proposal, Western would develop energy imbalance rates through the public rate process. Under the operations consolidation proposal, each office will continue to be responsible for managing its own assets. Under the BA consolidation proposal, Western will centralize BA settlements under a single senior manager responsible for operations. The BA consolidation proposal does not alter the method in which Western supplies energy from Parker-Davis and Hoover. As a result, Western does not anticipate changes to its future energy purchase strategies for its FES customers.

**Comment**

A commenter stated it is concerned about the result of a consolidation or merger that affects the availability and costs of bandwidths and the rate process under energy integration. Energy Integration service has been provided in the DSW with a unique method of variable bandwidth allowances and penalties depending on long/short or on/off peak positions. Based on the BAs balancing need to balance Area Control Error (ACE) with minimal down-regulation capabilities, the current rate structure attempts to minimize an overscheduled position in low demand off-peak hours as well as a short position over high demand on-peak times. Assessments are calculated hourly and an energy value is collected by the BA from the customer simultaneously. The integration of such an Energy Integration policy provides a multi-benefit approach to Energy Integration treatments because the BA has a means of minimizing customer contribution to a reliability problem; and since the assessment of Energy Integration is collected in energy instead of a financial invoice, additional energy flexibilities are gained in the Energy Manager's ability to work with Reclamation to attain Boulder Canyon Project monthly targets and provide for the ability to make BA sales in low demand hours to minimize the lack of down-regulation in the WALC BA. Has an assessment been made of operation under the large single BA with respect to an assessment of Energy Integration rate structures and implementation procedures? Has a study been made with an analysis of negative impacts on customers in one or more regions due to a new rate that might be more generic in nature?

**Response**

Western believes the commenter is referring to energy imbalance instead of energy integration. Under the operations consolidation proposal, the energy imbalance procedures will not be affected. Under the BA consolidation proposal, energy imbalance procedures and rates will be determined in a separate public rate process. As a result, Western has not conducted an impact analysis.

**Comment**

A commenter stated that it can understand reliability and the burdens that Western is undergoing, and can understand Western's desire to have a central group of expertise; however, the commenter wants to make sure that it does not pay for Western's reliability compliance—the “double-dip” concern.

**Response**

Western does not understand the “double-dip” concern. Western believes a more centralized reliability compliance program would reduce the vulnerability to non-compliance violations and the costs to administer the program would be reduced.

**Comment**

A commenter stated that because this is done for reliability and compliance issues and under NERC rules, the penalties can be stiff, by mixing two BAs which are not strongly tied together, is it possible that one region may get a penalty? Does it subsidize the cost of one BA that does not have a strong system and penalize the other region?

**Response**

Western operates each of its BAs consistent with the standards established by the NERC and Regional Entities, such as WECC. Under the BA consolidation proposal, Western will continue to operate consistent with such standards. A consolidation of Western BAs is not expected to cause one existing BA to subsidize the other since all Western BAs operate consistent with NERC and WECC standards.

**Comment**

A commenter stated it seems a large portion of the workload at RMR results from queue management and the reality is much of what is placed into the queue is never seen through to fruition by the requestors. The commenter asked whether Western might, at some future point, manage the uncertain requests separately from the true customers' requests.

**Response**

Western complies with regulations handed down by FERC and the reliability standards developed by NERC and WECC. Under Western's OATT, Western has standard procedures in accordance with the OATT for accepting requests into the queue. Western will continue to look at ways to increase timely processing of queue requests.

**Comment**

Western received a comment regarding FERC Orders Nos. 890 and 890A and the subject of ancillary services rates and specifically the settling of energy imbalances.

**Response**

Western has chartered a team to prepare Western's Order No. 890 compliance filing. Western's Order No. 890 process is outside the scope of this proceeding. As part of Western's implementation of FERC Orders Nos. 890 and 890A, Western will involve the public in a separate process.

**Comment**

A commenter stated many utilities contract out all of the study work for interconnection requests and system enhancements regarding system planning needs for interconnections. By performing these functions internally, Western has to add FTE positions instead of passing the cost to the person(s) or entities asking for the planning and interconnection. Adopting a similar practice would avoid new and more personnel costs and would put the burden of non-customer interconnection requests on the appropriate entity.

**Response**

Western does contract out a fair amount of study work related to tariff requests. Whether contracted out or conducted by Western, Western requires the entity making the interconnection and/or transmission service request to pay for the costs consistent with Western's OATT and FERC policies.

**Comment**

A commenter stated it is concerned about the calculation and implementation of WECC dues on customers as a result of consolidation. What study has been done to be sure that Reclamation and the Aggregate Power Managers (APM) customers are not disadvantaged? We do not believe it will be fair or equitable for there to be any cost shift in WECC dues.

**Response**

WECC dues are calculated based on the “Net Energy for Load” and Western distributes its share to customers based on those same criteria. Western does not believe that any party will be disadvantaged.

**Comment**

A commenter stated it is firmly opposed to any increased costs attributed to changes in the interpretation of standards or protocols, rules and regulations applicable to Network Integration Transmission Service (NITS) by virtue of consolidation. Standard OATT language at times can be left ambiguous and open to interpretation when it comes time to implement. DSW has worked with its NITS customers throughout the last few years to implement NITS in a customer friendly way that is believed to abide by OATT principles. Several nuances that have emerged at FERC and throughout the industry recently include the following:

- 1) Source of designated resources;
- 2) Firmness of upstream transmission; and
- 3) Un-designating network resources when surplus.

The commenter goes on to state that under a consolidated or reconfigured Western BA, the treatment of NITS customers in regards to these three characteristics, or other NITS implementation parameters, could differ dramatically. The commenter objects to any merger or consolidation efforts which will diminish these services or other flexibility.

**Response**

Both DSW and RMR will maintain a transmission service function for customer service. Western will continue to ensure consistent implementation of its OATT. Western agrees its OATT provides certain flexibilities and will continue to provide flexibilities on a non-discriminatory, open, and consistent basis.

**Comment**

A commenter stated there are a number of technical issues/programs that are very important in the event of consolidation of BAs. Changes to these programs concern DSW customers.

**Response**

It is not clear as to what is being referred to by “technical issues/programs.” Western intends to analyze the potential impacts that any form of BA consolidation would have on Western’s programs. Western believes this analysis would need to be completed and communicated to interested parties with the opportunity for their review and comment, through a public process, prior to any decision to proceed with the BA consolidation proposal.

**Comment**

A commenter stated it is sympathetic to the cost of compliance with FERC, NERC and WECC requirements. The commenter is working hard on these same matters. The commenter suggests that there are other alternatives to compliance that would compare favorably to those you have considered, one of which entails adding compliance staff to each BA. Other utilities have successfully implemented compliance plans based on a centralized compliance plan and staff, with minimal staff additions in satellite operating areas.

**Response**

The operations consolidation proposal will provide what the commenter recommends. The operations consolidation proposal provides for regional expertise and central management to ensure Western is consistent in its business and does not duplicate work where it can be avoided.

**Comment**

A commenter stated the limited ability of the Federal power system to provide energy imbalance, reserves, and regulation services which has been taxed by load growth within the BAs, environmental restrictions on dam operations and the drought. The commenter states the continued load growth and deployment of renewable generation by load-serving transmission customers in the Western BAs would continue until the Federal power generating facilities cannot successfully provide necessary regulation and load following capability for the BA. While BA consolidation may delay this effect somewhat, the commenter does not believe it will have much impact. The commenter believes that new arrangements will be required that involve Western and the load serving entities to jointly identify options and develop a long-term approach to these issues.

**Response**

Comment noted.

**Comment**

A commenter asked how Western proposes to handle planning in the different regions such as the Colorado Coordinated Planning Group (CCPG) and the Southwest Area Transmission (SWAT) subregional planning groups.

**Response**

Planning staff will reside at the Phoenix and Loveland offices in both the operations and BA consolidation proposals. Staff at RMR will coordinate its local issues through the CCPG, and staff at DSW will coordinate its local issues through SWAT. Broader planning issues will be coordinated through the over-arching WestConnect Planning Process. These processes will feed into the WECC Transmission Expansion Planning Policy Committee annually.

**Comment**

A commenter asked Western to clarify whether CRSP transmission facilities are in DSW or RMR.

**Response**

The CRSP generation is presently in the WALC (DSW) BA and is scheduled to both the WALC and WACM (RMR) BAs. The majority of CRSP transmission facilities reside in the RMR BA. Having the CRSP transmission system in two BAs adds significant complications to the existing operations and merchant functions.

**Comment**

Western received a question asking who will do all the work required in the list of tasks in section 3.a of the Operations Consolidation Report, prepared Dec. 14, 2007.

**Response**

Section 3.a of the report identifies tasks associated with integrating the two existing SCADA systems. Western will use both existing staff and contract support where necessary. The applicable managers and staff will prioritize their workload to ensure these efforts are successful.

**Comment**

A commenter asked how this plan makes the transmission system more reliable in the DSW.

**Response**

As identified in the operations and BA consolidation proposals, dispatch staff will remain in DSW and RMR so there will not be a decrease in reliability. Having RMR and DSW control centers performing primary and backup services for the other will increase reliability benefits and provide a faster response in the event one or the other control center is lost, than the current unstaffed ACCs.

**H. Hoover****Comment**

Western received several comments specifically asking whether Western's proposal was consistent with the 1984 Hoover Power Plant Act and whether there would be an impact to Western's existing power allocations associated with the Boulder Canyon Project.

**Response**

Western's plans are consistent with the Hoover Power Plant Act of 1984, Pub. L. No. 98-381. Among other things, the Hoover Power Plant Act of 1984 authorized the Secretary of Interior to increase the capacity of existing generating equipment at the Hoover Powerplant, to improve parking, visitor facilities, roadways, and to take other actions that contribute to the safety and sufficiency of visitor access to Hoover Dam and Powerplant. Section 105 of the Hoover Power Plant Act provides that the Secretary of Energy shall offer power to certain customers under certain terms and conditions. Western's existing power contracts including those from the Boulder Canyon Project will be fully honored under the proposal.

**Comment**

Western received several comments regarding the regulating reserve requirements of the WALC BA, how much of the regulating reserve requirement is met using Hoover Powerplant and, what impacts BA consolidation might have on the regulating reserves provided by Hoover Powerplant both in terms of capacity and cost to the Hoover Participants.

**Response**

The regulating reserve requirement for the WALC BA is 65 MW. The 65 MW is not a specific reservation of Hoover capacity. The 65 MW of regulating reserves is provided by integrating the regulating reserve capacity, from all three Federal generating plants in the WALC BA; Parker, Davis and Hoover. In accordance with the marketing plan, the projects are operationally integrated to improve the efficiency of the Federal system. Synchronized capacity from unloaded or motoring units at all three dams is integrated in much the same way as energy. Capacity can be used at Parker or Davis to cover Hoover, and vice versa. Since there is not a specific reservation of Hoover capacity, only unscheduled capacity from Hoover is used. When

unscheduled capacity is insufficient to cover regulating reserves, purchases are made. Capacity totals are tracked monthly and if, at the end of the year, the spinning or regulating reserves from Hoover are utilized by Parker-Davis for reserve requirements for the WALC BA, and this exceeds the amount of capacity Parker-Davis has contributed, then the Parker-Davis project is assessed motoring and synchronous losses in the same manner as Hoover contractors. Under any new BA configuration, spinning reserve requirements would still need to be communicated to merchant entities, and the DSW Energy Management and Marketing Office would continue to calculate and account for its reserves in the same manner to ensure all projects remain whole.

## **I. Marketing Plans**

### **Comment**

Several commenters raised concerns on whether the proposals will impact their existing contracts.

### **Response**

Western will continue to abide by its existing marketing plans. All existing contractual requirements will be honored.

### **Comment**

A commenter asked whether the proposals will result in a standardized energy charge to Western's customers.

### **Response**

There is nothing in these proposals that would standardize energy charges.

### **Comment**

Western received a comment stating that it is important to preserve the benefits of Federal preference power for those entities that were intended to benefit by law. Western received other comments requesting Western address the relationship between the proposals and Western's firm power delivery obligations.

### **Response**

The purpose of these proposals is to enhance Western's ability to reliably delivery Federal power at the lowest cost possible consistent with sound business practices. This is consistent with Western's statutory obligations.

### **Comment**

Western received a comment stating certain Western marketing plans provide for the delivery of firm power to preference customers, and do not specifically market the associated ancillary services and other BA services.

### **Response**

Western markets Federal power under Reclamation Laws and the guidelines developed by Western, at its discretion, through a power marketing plan. Currently, certain marketing plans provide for the delivery of firm power, including the necessary ancillary services required to deliver the power to the customer. Western is also responsible for operating its transmission system consistent with FERC approved reliability requirements. Under Western's OATT, ancillary services are made available to customers on a non-discriminatory basis. Western has discretion to purchase or self-provide ancillary services to meet its obligations under the OATT.

Western passes such costs on to customers taking transmission service under the OATT and/or customers to whom Western provides BA services via BA agreements.

## J. Rates

### Comment

A commenter requested Western consolidate and distribute the cumulative budget of the three regions.

### Response

The following table is Western's budget information only. The annual transmission revenue requirement for FY 08 is approximately \$200 million, which includes the budget information (below) along with, principal repayment, interest and other costs assigned to transmission.

Table 2:  
**Western's FY 08 Budget Information**  
*(from FY 07 Preliminary Power Repayment Studies)*

Project	FY 08 O&M Budget (\$)	FY 08 Capital Budget (\$)	Total (\$)	Percent of Total Budget
Central AZ (CAP)	3,314,599	0*	3,314,599	2.19%
CRSP/SLCIP	32,603,790	4,952,517	37,556,307	24.82%
Intertie	7,708,525	218,000	7,926,525	5.24%
LAP	34,135,322	24,825,002	58,960,324	38.97%
Parker-Davis	25,333,884	12,696,000	38,029,884	25.13%
Boulder Canyon	5,518,090	0*	5,518,090	3.65%
Total	108,614,120	42,691,519	151,305,729	

*\*Note: Boulder Canyon & CAP treat all RRADS (retirements, replacements and additions) as annual expenses—amounts are included in "O&M" column*

### Comment

Several commenters expressed opposition to increased expenses that would be associated with the consolidation and it appears that subsidies across projects will occur where one project would receive benefit in the form of reduced rates while another project rates would increase.

### Response

The cost information presented at the customer meetings was very preliminary in nature and designed for initial comparisons only. In the event the decision is made to consolidate BAs, Western will initiate a public rate process to develop ancillary services rates applicable to the new BA. However, prior to the initiation of a public rate process, Western will host a series of informal rate meetings examining the BA costs. Further cost allocations by power system and allocations between generation and transmission will need to be developed. Once the breakout of costs is determined, a public rate process will be initiated. Under the operations consolidation proposal, the process to develop new ancillary service rates will not be necessary. In either

instance, additional analysis and cost breakout by power system and function will need to be undertaken. While Western is only considering changes to ancillary service rates in the BA consolidation proposal, there may be a potential impact on other rates. Western will share additional information with customers as it moves through the process.

#### **Comment**

Several commenters questioned whether there would be an impact on the transmission rates and asked for clarification of the dollar amounts and revenue requirements impacts of the capital costs. Some commenters expressed concerns that Western's statement of not touching transmission rates appears to be deceptive and contradictory. In particular the statements within the presentations of "not at this time" raised concerns for some commenters.

#### **Response**

Western conducted a preliminary analysis to explore combining transmission rates. Due to significant cost shifts, Western decided not to pursue transmission system rates consolidation. Regarding the costs, Western refers the commenter to the [OCCES \(Attachment D\)](#) for annual and capital costs. The communication equipment is required regardless of whether Western takes any action regarding operations or BA consolidation. These equipment upgrades are critical for control, status, and metering of the high voltage transmission lines and substations. The annualized cost for these improvements without operations consolidation is \$3.3 million— with operations or BA consolidation it is \$2.3 million. Western's total annual transmission revenue requirement for RMR, DSW and CRSP is approximately \$200 million for FY 08. Western recovers these costs in its transmission and firm electric service rates.

#### **Comment**

A commenter opposed consolidated rates as a revenue generating device and tool to cover financial problems in other regions. The commenter stated each region was designed to fiscally stand on its own. There is a suspicion that consolidation is a trick to cover regional cash flow and cost problems with cross-subsidies from DSW.

#### **Response**

The operations and BA consolidation proposals are not being considered as a way to solve regional cash flow or cost problems. Western is required to track projects and power systems separately. Western is not consolidating transmission nor power and energy rates. Only in the event of the BA consolidation would Western consider new ancillary services rates for the BA.

#### **Comment**

A commenter asked how this plan benefits the ratepayers in DSW.

#### **Response**

The benefits of the operations and BA consolidation proposals include estimated annualized savings of \$2.1 and \$2.5 million, respectively. Other benefits include a reduction of resources to develop and maintain the operations systems and minimize the resources required to maintain NERC and WECC standards, along with a reduction in the number of required audits and assessments. The proposals will also eliminate the requirement for maintaining two ACCs. Under the BA consolidation proposal, increased efficiencies could be realized by the diverse loads and resources of this larger BA and reduce the regulation requirement by an estimated 20 percent. Western has not analyzed the savings for only DSW.

## **K. Cost Information**

### **Comment**

A commenter requested historical data for communication and SCADA costs to the extent that they have paid those costs from previous Western reorganizations. The commenter believes that it has been continually requested to pay new costs associated with reorganization.

### **Response**

Western has examined historical data for communication and SCADA and has attached it as [OCCES \(Attachment D\)](#).

### **Comment**

A commenter stated that it opposes any increased consolidation costs as the result of SCADA changes which impact the Federal Power Program (FPP) and its DSW Energy Management and Marketing Office and the associated 24/7 programs. Currently the costs are merged and customers pay for them indirectly.

### **Response**

As detailed in the [OCCES \(Attachment D\)](#), the SCADA costs decrease under Options C and D.

### **Comment**

A commenter stated it is concerned about the adverse cost impacts due to recalculations on deviations. We are unalterably and firmly opposed to any increased costs as a result of the difference in approaching energy imbalances, particularly for aggregated groups.

### **Response**

Comment noted.

### **Comment**

Several commenters raised concerns about the consolidation scenario because they provide regulation in DSW. The commenters raised concerns about the rate applicable to customers who have been working with Western on exchanges of services, providing of regulation service and energy banking relationships. The commenters object to being forced to seek additional compensation or cease providing regulation product to WALC. Depending on the consolidated BA portfolio of available resources, the lack of this regulation could result in the need to replace it with a market purchases. Historical purchases of this nature have been particularly costly. The commenters object to these additional costs if they would need to be borne by them.

### **Response**

As is done today within both WACM and WALC, a customers' self provision of ancillary services will be accommodated under a consolidated BA. As such, Western does not anticipate any increase in costs to customers.

**Comment**

A commenter stated DSW's rate for regulation was formed to take a customer's monthly kWh of load and apply a predetermined rate. At the time, it was recognized that customers receiving FES schedules were entitled to regulation service via the FES supply. Therefore, the decision was made to net out the amount of energy delivered under the customer's FES contracts from the total load. This in turn eliminated the double charging for regulation service. Under a consolidated or reconfigured balancing authority, will the regulation rate change and the overall costs for some BA customers go down in the RMR at the expense of other customers' in the DSW costs going up? Will some customers subsidize the regulation costs of others?

**Response**

Under operation consolidation there will be no change to the regulation rate. Under BA consolidation the rates will be determined in a public rate process.

**Comment**

Several commenters expressed concern over the presentation of Options C (RMR, DSW back each other up, change in annual costs from existing structure increases by \$1.8M, change in one-time costs from existing structure increases by \$6.6M) and D (RMR and DSW consolidated, change in annual costs from existing structure increases by \$1.2M, change in one-time costs from existing structure increases by \$6.6M) on slide 20. Simple payback analyses shows the payback period to be too excessive to warrant further consideration.

**Response**

As it relates to Options C and D, i.e., operations and BA consolidation proposals, the increased efficiencies, in the short term, are not just financial. Western believes these options will allow Western to avoid costs in the future as the regulatory agencies increase demands on the electric utility industry. Other efficiencies include the use of common tools, operational benefits such as fewer reports to regulatory agencies, fewer NERC and WECC audits, decrease in the number of dispatch desks from 10 to nine, the reduction of two ACCs—eliminating duplicate activities between the existing BAs—and freeing up personnel presently performing these tasks to focus on other operations activities. Rather than incurring a \$6.6 million expense, Western anticipates a net savings. Western discusses the financial benefits in the new cost analysis included in the introductory remarks. Based on a 10-year analysis the annualized savings for operations consolidation is \$2.1 million and for BA consolidation it is \$2.5 million as detailed in the [OCCES \(Attachment D\)](#).

**Comment**

A commenter asked what are the implications of the “no action alternative.” Is it a foregone conclusion that “no action” will result in higher costs to the customers? Has Western addressed the feasibility of reassigning functions as opposed to just adding functions/FTEs?

**Response**

The “no action alternative” results in Option B, i.e., existing staff with regulatory compliance, where Western adds staff and continues to duplicate work in RMR and DSW.

**Comment**

A commenter asked whether the no action alternative implies that only program direction costs will be incurred for this project.

**Response**

No, program direction costs would not be the only costs incurred in either the operations or BA consolidation proposals. Non-program direction costs, such as additional capital costs would also be incurred.

**Comment**

A commenter asked Western to provide clarification on the cost and the percentage of the annual transmission revenue requirement associated with operation consolidation.

**Response**

Western refers the commenter to the [OCCES \(Attachment D\)](#) for annual and capital costs. The communication equipment is required regardless of whether Western takes any action. These equipment upgrades are critical for control, status, and metering of the high voltage transmission lines and substations. The downtime can be significant depending on component failure, the availability of the part, and the travel time to and from the microwave site.

**Comment**

A question was asked relating to the expected impacts on employee travel costs, and what has been the actual experience over the past three years.

**Response**

The operations and BA consolidation proposals leave the majority of the DSW personnel in place, reducing the number of dispatch desks in DSW by only one. As a result, additional travel should only be related to the duties of the manager of Transmission Services and the manager of Transmission Operations. Presently both managers must attend the same meetings within Western and in the industry. As a result of the proposal, the net employee travel cost is expected to be the same as exists today.

**L. Funding****Comment**

Several commenters asked how this would affect alternative financing arrangements and whether the real reason for these proposals was to acquire more funding.

**Response**

These proposals are not intended to address funding arrangements nor are they expected to significantly impact alternative funding.

**Comment**

A commenter would like to know what source of funds Western expects to use to fund the capital projects needed to implement the proposals.

**Response**

Western expects to use the normal funding process. Western will request appropriations, and if the agency does not receive appropriations then Western would seek the authority to use customer funding arrangements. If Western receives authority to use customer funding, Western would work with customers to acquire funds.

**Comment**

Several comments referred to “Net Zero” and that concept concerns Western’s customers.

**Response**

Western did not intend that the proposal address the appropriations process or customer funding arrangements. Net Zero is outside the scope of this process.

**M. Requests to Undertake Studies****Comment**

Several commenters stated that if there are analyses or studies that have been done which show how costs might shift or what specific costs would be impacted, they would like copies and have the opportunity to make comments.

**Response**

The cost information presented at the February 2008 customer meetings was preliminary in nature and designed only for initial comparisons. It is too early in the process to identify specific cost shifts. As part of this response, Western is providing the [OCCES \(Attachment D\)](#). Western will share additional information with interested parties as it moves through the process.

**Comment**

A commenter stated that while it is clear that Western’s staff and management have dedicated a region-wide effort to evaluate the best possible option, the information provided at the informational meetings did not provide the commenter with enough cost/benefit analysis. The commenter stated that in order to provide truly material input on Western’s options, more details are necessary.

**Response**

Western agrees that limited information was available at the February customer meetings. This is a result of Western’s desire to involve interested parties early in the process. Western is making additional details available as part of these responses to customer comments and questions. If Western decides to proceed with BA consolidation, Western is committed to hold meetings with customers and interested parties in the future to further discuss them.

**Comment**

Western received a question asking for studies that show the increased efficiencies and whether there are advantages of operating a larger operations center.

**Response**

As discussed in the response to the previous question, the cost information presented at the customer meetings was preliminary in nature and designed only for initial comparisons. As part of this response, Western is providing the [OCCES \(Attachment D\)](#). Western will share additional information with interested parties as it moves through the process.

Western believes there will be benefits in the future as the regulatory agencies increase demands on the electric utility industry. Other efficiencies include the use of common tools, operational benefits such as fewer reports to regulatory agencies, fewer NERC and WECC audits, decrease in the number of dispatch desks from 10 to nine, the reduction of two ACCs—eliminating duplicate activities between the existing BAs—and freeing up personnel presently performing these tasks to focus on other operations activities.

**Comment**

A commenter asked if the regulation rate changes and the overall costs for some BA customers go down in the RMR at the expense of other customers in DSW.

**Response**

Under the operations consolidation proposal there is no rate impact. Under the BA consolidation proposal the rates will be determined in a public rate process.

**Comment**

A commenter stated there are some aspects of the proposal which deserve study, such as consolidating reporting requirements.

**Response**

The operations consolidation proposal will result in the consolidation of reporting requirements for DSW and RMR.

**Comment**

A commenter asked if there are power quality studies available for review that show the effects of generation imbalance in RMR being compensated by generation in DSW.

**Response**

Western anticipates that generation from both RMR and DSW would be used to balance the BA and all projects would be compensated for the services they provide.

Detailed analysis will occur if Western pursues the BA consolidation proposal.

**Comment**

Western received several comments stating any consolidation studies must include a detailed plan for how regulation and imbalance services are provided across the BA, and how project repayment structures are appropriately maintained with minimal cross subsidies between projects.

**Response**

If Western decides to pursue the BA consolidation proposal, Western will perform these studies.

**Comment**

A commenter requested a study that explains “duplicative costs.”

**Response**

Duplicative costs are similar functions that are being done by multiple offices. For an example, use the tariff and reliability compliance activities that both regions currently perform. See the [OCCES \(Attachment D\)](#) for the cost analysis.

### **Comment**

A commenter asked whether there has been a study of assessments for deviations outside of the different bandwidths for each region, RMR and DSW, operating alone or under consolidation? Under consolidation are there negative impacts on us? What about associated penalties? Has there been a study of the impact on us if there is a loss of bandwidth by us in DSW? The commenter is unalterably and firmly opposed to any increased costs as a result of the difference in approaching energy imbalances, particularly for aggregated groups.

### **Response**

This comment seems to be related to energy imbalance services. If Western proceeds with the BA consolidation proposal, it will consider interested parties' input during the public rate process. Western agrees that detailed studies would be required, the results of which would be made available to the customers.

### **Comment**

A commenter stated that without being provided further information and supporting detail, the commenter opposes any initiatives that are not directly related to Western's obligation to deliver Federal hydropower to its long-term firm power contractors. Funding (including costs of planning, capital, Operation, Maintenance and Replacements, program direction, repayment) and risk associated with initiatives being considered which are outside this scope and not beneficial or cost-effective to CRSP firm power contractors must be borne directly by the recipient beneficiary(ies). In order for the commenter to be able to work in a constructive, interactive process with Western regarding strategic planning and proposed operations consolidation processes, the commenter requests and recommends that for each of the Strategic Planning elements, the following information be provided:

- a) Relationship to firm power delivery obligation
- b) Beneficiary(ies)
- c) Cost/benefit and rate impact, by project
- d) Funding source(s)
- e) FTE implications, initially and over time
- f) Affected work plan category(ies)
- g) Timetable

The commenter goes on to state that Western plays an important role in marketing the clean, renewable Federal hydropower resource on a cost basis. The commenter expresses a willingness to work with Western in a partnership, iterative manner to preserve and enhance that mission and to create efficiencies and cost savings for CRSP.

### **Response**

Western markets Federal power under the Reclamation Laws and the guidelines developed by Western, at its discretion, through a power marketing plan. The purpose of these proposals is to enhance Western's ability to reliably deliver Federal power at the lowest cost possible consistent with sound business practices. This is consistent with Western's statutory obligations. As a result both transmission and power customers will benefit from the proposal.

As part of this response, Western is providing the [OCCES \(Attachment D\)](#). Western has not examined the costs per project. Western will share additional information with interested parties as it moves through the process.

As stated previously, Western expects to use the normal funding process.

[Attachment B](#) is a “Staffing Comparison Options Matrix,” which explains FTE.

As part of the examination it became apparent the cost to maintain the existing communication systems was not included in the current 10-year work plans that RMR, CRSP and DSW provided to their customers. Western has included these costs in the operations and BA consolidation proposals and will update future 10-year work plans with these communications costs as appropriate.

Western will develop a timetable when it makes a decision on a proposal.

## **N. Transformation**

### **Comment**

A commenter stated that its membership spans two of the BAs being proposed for consolidation, WACM and WALC. The commenter is still struggling with the impacts to them as a result of “Transformation.” The commenter has been successful in working with Western to mutually beneficial outcomes in the past, and hopes to do so again with this proposal.

### **Response**

Comment noted.

### **Comment**

A commenter asked for the actual costs from the prior consolidation compared to what was projected for the current proposal. In particular, the commenter desired information on the estimated costs of consolidating communications, dispatching, etc., along with the projected benefits compared to the actual costs.

### **Response**

Some of the benefits are not cost related. They can better be characterized as cost avoidance benefits. Having one group that responds to NERC and FERC assists Western in avoiding sanctions, reducing reporting efforts, and increasing technical competencies by having staff focus on specific issues. Tracking of specific transformation related savings has not been done. Given the multiple factors impacting budgets, any attempt to isolate only transformation costs from varied financial accounting systems does not provide a meaningful basis for comparison.

### **Comment**

A commenter states that since the original formation of Western, Consolidation of Control Areas has been considered and rejected on several occasions. The commenter asks can those older studies and prior evaluations be reviewed to gain insight into earlier considerations. The commenter goes on to ask whether Western has contacted previous managers for information not found in the current documentation.

### **Response**

Control Area Consolidation was considered and implemented by Western in 1998 for the WAUC, WALM and WALC resulting in the current WACM and WALC BAs. (This eliminated the WAUC Control Area, in Montrose). Technology has advanced making further consolidations feasible. As stated in previous responses, Western understands the savings are not considered great by some customers, but it will result in a more efficient organization.

Western personnel involved in this decision include managers who were involved in Western's previous reorganizations and consolidations.

**Comment**

Western received a question asking how long did the communications related work take in the previous consolidation?

**Response**

It took Western approximately two to three months to move the boundary metering system and Remote Terminal Unit (RTU) circuits from Montrose to Loveland. In addition, it took Western a few months to install boundary metering RTUs in the field for the Pick-Sloan area.

**O. UGP**

**Comment**

Western received several comments recommending that if Western proceeds with the BA consolidation proposal, Western should proceed with DSW and RMR, then if savings are realized, UGP could be a second phase if studies show there are benefits. Presently the presentations do not show a benefit to UGP.

**Response**

Comment noted.

**Comment**

A comment stated the present operating agreements between Basin Electric and Western in the UGP region will erode with the BA consolidation proposal.

**Response**

If Western decides to pursue the BA consolidation proposal, Western will work closely with interested parties to ensure that it fully honors all existing agreements.

**Comment**

Several comments stated there has not been sufficient information on how the UGP customers would be impacted, such as cost impacts of customers west of the Miles City tie, tagging practices, reserve reporting, potential pan-caking of losses and the impact of changed regulation and imbalance costs. Western needs to address these issues in detail before a decision is made.

**Response**

The operation consolidation proposal will not affect UGP. Western is committed to working closely with interested parties if it decides to further pursue the BA consolidation proposal.

**Comment**

A commenter stated the implications for the Pick-Sloan Missouri Basin Program are unsettling, and under this proposal the Pick-Sloan's Eastern Division would be carved up with Montana customers on the west system being subject to RMR's operating regulations and tariff.

**Response**

The operations consolidation proposal will not affect Montana. The BA consolidation proposal will not modify the transmission rate. Western has a single OATT covering all regions. It is important to note that WAUW is located in the WECC and WAUE is in the Midwest Reliability Organization. As a result, WAUE and WAUW must comply with different regulatory standards.

**Comment**

Western received a comment that the proposals include two different markets and where it might be a very good thing for operations, it may be difficult for customers within a region, specifically customers in Montana.

**Response**

Comment noted.

**P. Miscellaneous Comments****Comment**

Western received a comment stating the concept overall is very worthy and doable.

**Response**

Comment noted.

**Comment**

A commenter stated the proposals lack substance, details and specificity.

**Response**

Western presented the idea to interested parties as soon as a meaningful draft proposal was available. If Western had held meetings sooner, there would not have been a proposal to discuss—there only would have been verbal ideas. Even with the proposals presented, many interested parties have asked for additional details that are not available because it is so early in the process.

**Comment**

Several commenters requested copies of the comments, questions and responses.

**Response**

Western will post all comments, letters, questions and responses on its Web site at <http://www.wapa.gov/about/StrategicPlanning/opscon.htm>

**Comment**

A comment was made congratulating Western on this effort to streamline and achieve efficiencies.

**Response**

Comment noted.

**Comment**

A comment was made applauding Western for the efforts to consolidate some aspects of operations, particularly functions subject to third-party jurisdiction, such as FERC, NERC and WECC functions. Having a central group of experts, with staff in the regions, avoids duplication and problems, and provides each region with access to central experts.

**Response**

Comment noted.

**Comment**

Several commenters inquired whether there was “a larger” issue driving these proposals. Western also received a comment stating that before proceeding further, Western needs to inform its customers of its “ultimate plans” if this proposed consolidation were to go forward.

**Response**

If by “a larger” issue, or “ultimate plans,” the interested parties are referring to Western’s preliminary analysis of the requirements to be a Federal Transmission Organization, Western has concluded that as a result of the significant differences in project transmission rates, Western will not pursue this option further as part of this strategic planning effort.

**Comment**

A commenter noticed that on Page 26 of the February 2008 presentation the tag rate increases.

**Response**

This was simply an example to show an average tag per day if the two regions operated as one BA. It is an estimate used only for illustrative purposes.

**Comment**

A commenter asked for clarification of the two numbers on Page 28 of the February 2008 presentation. In particular, what is the difference between them? Was it the same number calculated on a different basis—kilowatts per month or kilowatt hours?

**Response**

This was a simple calculation to convert from \$ per kW/month and mills per kWh to a \$ per kWh for display purposes only. It is an estimate used only for illustrative purposes.

**Comment**

There was a question at the Feb. 14 meeting in Loveland asking if there were any trends in the questions asked at the Feb. 12 meeting in Phoenix.

**Response**

At the Feb. 12 meeting in Phoenix, there were multiple comments requesting additional time for interested stakeholders to submit comments, requesting Western protect the existing marketing projects and requesting Western keep financial impacts to a minimum.

**Comment**

Western received several comments expressing concern that the Federal power customers will subsidize entities such as renewable generators, Native American customers, environmental concerns and transmission customers.

**Response**

Western develops rates through a public rate process and examines allocating costs on a cost/causation principle. In the event Western implements these proposals, Western will develop a rate for that proposal through a separate public rate process. Western has received non-reimbursable funds and grants to perform studies for renewable generation in the past.

**Comment**

Western received a comment that “Western seems to have forgotten that we, and not Western, are the beneficiaries of the Reclamation Programs from which this agency was born, both water and power, and those programs are regionally specific and congressionally enacted. We want to retain the benefits of the Federal program and will pay the costs of keeping the program local and responsive to local interests. Western is an agency created to bring to us, the customers, the benefits of the projects authorized by Congress. Customers either pay all the costs of these projects, or are committed to pay them if others leave the system.”

**Response**

Congress enacted the Reclamation Laws for multiple purposes, including, navigation, flood control, irrigation and power. In many instances the Reclamation Project costs are designated as reimbursable or non-reimbursable and may be allocated to specific customers based on project purposes. Under the Reclamation Laws, Western has wide discretion in how and to whom it markets power. Western’s mission is to market Federal power at the lowest possible costs consistent with sound business practices, and this strategic planning process is intended to ensure Western would be able to fulfill that mission in the future.

**Comment**

Western received a question asking what the rationale is for continuing this effort.

**Response**

As described more fully in the operations and BA consolidation proposals, there are efficiencies to be gained by pursuing either option. The primary purpose is to establish a single Western Transmission Services organization within the WECC under the direction of a single Western senior manager. Establishing the Transmission Services organization under the operations consolidation is reorganization, moving the responsibilities of, and the people performing this function, to a single senior manager. Western believes that moving this function under a single senior manager will serve to increase the effectiveness of Western’s response to an extremely dynamic electric utility industry, particularly as it relates to transmission service regulations including tariff interpretation, implementation and compliance. Given the Transmission Services organization will remain distributed within the regions essentially as it is today, little or no relocation of existing personnel will be required. Western believes that retaining planning, tariff and associated customer service expertise within the regions is essential to facilitate effective participation in sub-regional and local transmission planning activities and well as continue to provide the level of customer service needed by customers regarding their requests for transmission interconnection and transmission services under the OATT. The operations consolidation proposal does not include the creation of a separate contracts staff for the Transmission Services organization. Rather, the proposal anticipates utilizing existing contracts expertise in both DSW and RMR. Western believes there will be benefits in the future as the regulatory agencies increase demands on the electric utility industry. Other efficiencies include the use of common tools, operational benefits such as fewer reports to regulatory agencies, fewer NERC and WECC audits, decrease in the number of dispatch desks from 10 to nine, the reduction of two ACCs—eliminating duplicate activities between the existing BAs—and freeing up personnel presently performing these tasks to focus on other operations activities.

**Comment**

Western received several comments asking how the proposal was consistent with Western's mission to market Federal hydropower and to clearly communicate Western's goal.

**Response**

Western's mission is to market Federal power at the lowest possible costs consistent with sound business practices, and these strategic planning proposals are intended to ensure Western will be able to fulfill that mission in the future with increased efficiencies.

**Comment**

A commenter asked if Western's mission is to be a "world class transmission provider," or is it to market the Federal hydropower resource.

**Response**

Western's mission is to market and reliably deliver Federal power and related services. As part of Western's mission, it will provide transmission services consistent with its OATT.

**Comment**

Western received a question asking what are Western's expected attrition rates in the next five years and how do these assumptions impact this proposal?

**Response**

Western's attrition rate has been approximately seven percent per year. Western expects this trend to continue. Western considered the attrition rate and its potential for mitigating the need to relocate operations personnel for both the operations and BA consolidation proposals.

**Comment**

Western received a question asking what is meant by a "risk to system operations" in section 3.c of the Operations Consolidation Report, prepared Dec. 14, 2007.

**Response**

Western believes the question referred to section 3.d, which highlighted the uncertainties associated with making organizational changes and the stress that is felt by the employees. If Western were to experience a sudden substantial loss of staff, this would result in a risk to Western's ability to operate its system. Since the current options involve little staffing changes there is very little remaining risk.

**Comment**

Western received a question asking in section A.3.4 of the Operations Consolidation Report, prepared Dec. 14, 2007, how is reference to a "high level of generation-related ancillary services" considered a success factor?

**Response**

The section refers to "a high-level review of generation-related ancillary services." Western considered it to be important that the project team understand the ancillary services impact as part of any proposal that would be presented to interested parties.

**Comment**

Western received a comment that stated “It seems that cost analysis should be completed before a project plan is completed to determine feasibility.”

**Response**

Western believes that a project plan must be created in order to perform a cost analysis.

**Comment**

Western received a comment stating the concept overall is very worthy and doable.

**Response**

Comment noted.

**Comment**

A commenter stated there were no benefits to the proposal, just costs and problems. In addition the commenter stated the average of rates, conforming processes between regions and blending of differences are unacceptable.

**Response**

Western believes there are efficiencies to be gained by consolidating the operations and Transmission Services functions under one manager. Western believes with the consolidation of these functions it will be able to better focus on core work and provide more consistent OATT administration across the regions.

**Comment**

At the informational meetings, commenters asked for contact information to submit comments.

**Response**

Names with e-mail addresses were handed out at the February 2008 meetings. Here are the Regional Managers names and e-mail addresses.

Tom Boyko, SNR Regional Manager, [Boyko@wapa.gov](mailto:Boyko@wapa.gov), 916-353-4418

Tyler Carlson, DSW Regional Manager, [Carlson@wapa.gov](mailto:Carlson@wapa.gov), 602-605-2453

Jim Keselburg, RMR Regional Manager, [Keselbrg@wapa.gov](mailto:Keselbrg@wapa.gov), 970-461-7201

Bob Harris, UGP Regional Manager, [RHarris@wapa.gov](mailto:RHarris@wapa.gov), 406-247-7405

Brad Warren, CRSP Manager, [Warren@wapa.gov](mailto:Warren@wapa.gov), 801-524-6372

## IV. Acronym Glossary

ACC	Alternate Control Center
ACE	Area Control Error
AGC	Automatic Generation Control
APM	Aggregate Power Managers
ATC	Available Transfer Capability
BA	Balancing Authority
CCPG	Colorado Coordinated Planning Group
CRSP	Colorado River Storage Project
DSW	Desert Southwest Region
EMS	Energy Management System
FERC	Federal Energy Regulatory Commission
FES	Firm Electric Service
FPP	Federal Power Program
FTE	Full-time equivalent
IPPs	Independent Power Producers
OASIS	Open Access Same-time Information System
OATT	Open Access Transmission Tariff
OCCES	Operations Consolidation Cost Estimate Spreadsheet
NERC	North American Electric Reliability Corporation
NITS	Network Integration Transmission Service
RDRC	Rocky Mountain Desert Southwest Reliability Center
RMR	Rocky Mountain Region
RTU	Remote Terminal Unit
SCADA	Supervisory Control and Data Acquisition
SWAT	Southwest Area Transmission
TSP	Transmission Service Provider
UGP	Upper Great Plains Region
VAR	Volt Amperes Reactive (a.k.a. reactive power)
WACM	Western Area Colorado/Missouri control area
WALC	Western Area Lower Colorado control area
WAUE	Western Area Upper Great Plains-East control area
WAUW	Western Area Upper Great Plains-West control area
WECC	Western Electricity Coordinating Council

Attachment A



Department of Energy  
Western Area Power Administration  
P.O. Box 281213  
Lakewood, CO 80228-8213

AUG 15 2000

RECEIVED  
AUG 17 2000

Ms. Leslie James  
Executive Director  
Colorado River Energy Distributors Association  
Suite 111  
1600 West Broadway Road  
Tempe, AZ 85282

Dear Leslie:

Enclosed is a copy of my August 15, 2000, decision on the allocation of certain Colorado River Storage Project costs.

Sincerely,

Michael S. HacsKaylo  
Administrator

Enclosure

cc:

Mr. J. Tyler Carlson, G0000  
Regional Manager  
Desert Southwest Regional Office  
Western Area Power Administration  
P.O. Box 6457  
Phoenix, AZ 85005-6457

Mr. Dave Sabo, L0000  
CRSP Manager  
CRSP Customer Service Center  
Western Area Power Administration  
P.O. Box 11606  
Salt Lake City, UT 84147-0606

Mr. Joel K. Bladow, J0000  
Regional Manager  
Rocky Mountain Regional Office  
Western Area Power Administration  
P.O. Box 3700  
Loveland, CO 80539-3003



## Attachment A

VA JPA F 1400.59#  
(7-91)

United States Government

Department of

Western Area Power Administration

# memorandum

DATE: August 15, 2000

REPLY TO  
ATTN OF: A0000, M. Hacskaylo

SUBJECT: Colorado River Storage Project Cost Allocations

TO: T. Carlson, G0000, Phoenix, AZ  
J. Bladow, J0000, Loveland, CO  
D. Sabo, L0000, Salt Lake City, UT

## Introduction

During the past several months, management and staff of the Colorado River Storage Project Management Center (CRSP MC), the Desert Southwest Region (DSW), and the Rocky Mountain Region (RMR) have engaged in vigorous debate over allocation of historic capital costs associated with the control center consolidation. The Colorado River Energy Distributors Association has filed with me a request for arbitration of the allocation issues. The arbitration request is in abeyance, pending my decision. I have asked each office to provide me with its position on the issues, and have considered that information in making my decision.

## Allocation of Capitalized Supervisory Control and Data Acquisition (SCADA) Costs

The history of SCADA costs for the three offices since 1990 is a tangled one. As I understand it, since 1990 the DSW has paid \$17.5 million for SCADA, the CRSP MC has paid \$6.1 or \$8.8 million, depending on whether Sierra Nevada Region costs are included in the calculation, and RMR has paid \$5.1 million. These costs include interest during construction. With Transformation and control area consolidation, the dispute among the offices is over which office pays what portion of the capitalized SCADA costs. Among staff, there is consensus to use a SCADA point count methodology as the allocator for future capitalized SCADA costs. Capitalized costs allocated in this manner would be accounted for among the power systems of the three offices. Effective October 1, 2000, I approve the use of this methodology for allocation of future capitalized SCADA system costs among CRSP MC, DSW, and RMR.

The answer is not as clear on allocation of capitalized historic SCADA costs. There are many disputes over which office received the benefit of decisions to shift SCADA systems among the offices, and of benefits gained if Transformation and control area consolidation had not taken place. I do not support a cost-benefit approach to allocation of historic capitalized SCADA costs, due to the highly subjective nature of such an approach. It is more appropriate to use the SCADA point count methodology applied on a year-by-year basis to historic capitalized costs. For example, I understand that the DSW SCADA system initially monitored only a few SCADA points for CRSP MC. As part of Transformation, the number of SCADA points increased

Attachment A

2

substantially. Thus, the historic capitalized cost allocated yearly to the CRSP power system would change based on the yearly change in number of SCADA points.

Accordingly, I direct the three of you to (1) reach agreement on historic capitalized SCADA costs for the three regions, and (2) allocate those costs based on historic yearly SCADA point counts. You will complete these actions within 90 days of the date of this memorandum.

A side issue in the allocation of historic capitalized SCADA costs is the treatment of costs credited to CRSP MC for transfer of the CRSP MC SCADA system for use in the new RMR SCADA system. CRSP MC appears to take the position that it should be credited for the book value of the system transferred to RMR. RMR's position is that only a small portion of the system transferred was used and useful to the new RMR SCADA system. It is my opinion and decision that only those costs associated with the parts of the CRSP SCADA system that were used and useful for the RMR SCADA system should be credited to the CRSP MC.

RMR Mapboard

I understand that CRSP MC and RMR have agreed that the costs of the RMR mapboard will be split based on the SCADA point count methodology. I concur.

RMR Phone Switch

I understand that RMR contends that the cost of the new RMR phone switch should be allocated based on FTE division throughout the region. The resulting allocation percentages would be 33 percent to CRSP and 67 percent to LAP. CRSP MC contends that the new phone switch did not benefit employees of the Montrose office who charge their time to CRSP, and the allocation should factor in pre-Transformation percentages. Thus, CRSP should pay only 12 percent of the costs. A better approach is to recognize that the cost of the new phone switch should be allocated to the projects based on FTE division throughout the region. I approve the RMR approach.

RMR Remodel

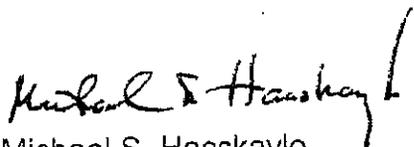
CRSP MC contends that it should be allocated 33 percent of the costs of remodeling the RMR dispatch center, because, in most cases, CRSP MC pays about 33 percent of RMR costs. RMR contends the costs should be split 50/50. I believe that there is no basis to charge CRSP MC 50 percent of the remodeling costs. A better approach is to use the SCADA point count methodology, resulting in a 31 percent CRSP MC/69 percent RMR split on the costs. You will use this approach.

Attachment A
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3

Summary

Western will improve its internal practices to ensure that future decisions on cost allocation issues are documented at the time the cost allocation decisions are made. I understand that approximately 2 years ago the three offices reached agreement at the staff level on a document entitled *CRSP Budgeting Procedures Proposed Plan A*. You will amend *Plan A* to include the requirement that decisions on cost allocation issues are documented at the time the cost allocation decisions are made. As amended, *Plan A* should eliminate similar disputes in the future. Accordingly, within 90 days of the date of this memorandum I require each of you to execute the amended *Plan A*. I will amend each of your performance agreements with me to require compliance with *Plan A*.



Michael S. Hacskeylo  
Administrator

Attachment A



**CREDA**  
Colorado River Energy Distributors Association

**ARIZONA**

Arizona Municipal Power Users Association

Arizona Power Authority

Arizona Power Pooling Association

Irrigation and Electrical Districts Association

Navajo Tribal Utility Authority  
(also New Mexico, Utah)

Salt River Project

**COLORADO**

Colorado Springs Utilities

Intermountain Rural Electric Association

Platte River Power Authority

Tri-State Generation & Transmission Cooperative  
(also Nebraska, Wyoming)

Yampa Valley Electric Association, Inc.

**NEVADA**

Colorado River Commission of Nevada

Silver State Power Association

**NEW MEXICO**

Farmington Electric Utility System

Plains Electric Generation & Transmission Cooperative  
(also Arizona)

City of Truth or Consequences

**UTAH**

City of Provo

Strawberry Electric Service District

Utah Associated Municipal Power Systems

Utah Municipal Power Agency

**WYOMING**

Wyoming Municipal Power Agency

**Leslie James**

Executive Director  
CREDA  
Suite 111  
1600 West Broadway Road  
Tempe, Arizona 85282

Phone: 480-557-0987  
Fax: 480-557-0988  
Cellular: 602-469-4046  
Email: creda@uswest.net

June 15, 2000

via email & U.S. Mail

Michael S. Hacsckaylo, Administrator  
Western Area Power Administration  
PO Box 281213  
Lakewood, CO 80228-8213

Dear Mr. Hacsckaylo:

Thank you for your letter of June 7, 2000, responding to CREDA's May 23, 2000, letter requesting arbitration under Letter Agreement 92-SLC-0208. CREDA wrote you because we believed that the disagreement we have encountered with Western over SCADA costs had ripened to the point that CREDA was obliged under Section 5(a) of the Letter Agreement to present to you its request for arbitration of the matter. We understand from your letter that in your view the disagreement has not yet ripened to the point envisioned in Section 5(a) and that no time deadlines for either party to act under that section are currently running.

We appreciate your prompt response to our letter and will further consider the matter after you have reached your decision and we have been informed of it. We understand that, at least in this case, you do not perceive that a disagreement has arisen yet to the point that we are obligated to inform you of a disagreement which CREDA wishes to resolve through arbitration.

Sincerely,

Leslie James  
Executive Director

cc: CREDA Board  
Cliff Barrett  
Ted Myers

bcc: Don Allen

*Handwritten notes:*  
Emailed 6/15  
faxed 6/15

JUN-07-2000 WED 07:59 AM WAPA ADMINISTRATOR

FAX NO. 720 962 7083

P. 02/02

Attachment A



**Department of Energy**  
Western Area Power Administration  
P.O. Box 281213  
Lakewood, CO 80228-8213

Ms. Leslie James  
Executive Director  
Colorado River Energy  
Distributors Association  
Suite 111  
1600 West Broadway Road  
Tempe, Arizona 85282

Dear Ms. James:

Your May 23, 2000, letter requests arbitration under Letter Agreement 92-SLC-0208 (the 1992 Letter Agreement) with regard to a perceived dispute over the allocation of Supervisory Control and Data Acquisition (SCADA) costs.

The cost allocation issue arises in the context of the Fiscal Year 2002 work program review process for the Salt Lake City Area Integrated Projects firm power rate.

In my judgment, the SCADA cost allocation issue is not ripe for arbitration under the 1992 Letter Agreement. Your letter recognizes that Western is still in the decision-making process with regard to allocation of these costs. I will be meeting this month with Dave Sabo, Tyler Carlson, and Joel Bladow to decide the issue. I recommend that CREDA hold its request for arbitration in abeyance, without prejudice to its contractual rights under the 1992 Letter Agreement, until I render a decision in this matter.

After I make my decision on this issue, the results will be incorporated into the final work program data and the ratesetting power repayment study. The firm power rate adjustment process will not start until the ratesetting power repayment study is revised as needed to reflect my decision.

Sincerely,

A handwritten signature in black ink that reads "Michael S. HacsKaylo".

Michael S. HacsKaylo  
Administrator



Attachment A



**CREDA**  
Colorado River Energy Distributors Association

**ARIZONA**  
Arizona Municipal Power Users Association

Arizona Power Authority  
Arizona Power Pooling Association

Irrigation and Electrical Districts  
Association

Navajo Tribal Utility Authority  
(also New Mexico, Utah)

Salt River Project

**COLORADO**  
Colorado Springs Utilities

Intermountain Rural Electric Association

Platte River Power Authority

Tri-State Generation & Transmission  
Cooperative  
(also Nebraska, Wyoming)

Yampa Valley Electric  
Association, Inc.

**NEVADA**  
Colorado River Commission  
of Nevada

Silver State Power Association

**NEW MEXICO**  
Farmington Electric Utility System

Plains Electric Generation & Transmission  
Cooperative  
(also Arizona)

City of Truth or Consequences

**UTAH**  
City of Provo

Strawberry Electric Service District

Utah Associated Municipal Power Systems

Utah Municipal Power Agency

**WYOMING**  
Wyoming Municipal Power Agency

**Leslie James**  
Executive Director  
CREDA  
Suite 111  
1600 West Broadway Road  
Tempe, Arizona 85282

Phone: 480-557-0987  
Fax: 480-557-0988  
Cellular: 602-469-4046  
Email: creda@uswest.net

May 23, 2000  
VIA FEDEX

Mr. Michael Hacsckaylo  
Administrator  
Western Area Power Administration  
12155 W. Alameda Parkway  
Lakewood, CO 80228-2802

RE: Presentation of Dispute Pursuant to Agreement No. 92-SLC-0208, Joint Procedures for Review of Work Program Information by Customers of the Salt Lake City Area Integrated Projects (Agreement)

Dear Mr. Hacsckaylo:

The Colorado River Energy Distributors Association (CREDA) and Western are currently engaged in the FY2002 work program review process in accordance with the subject Agreement. Western has informed CREDA that certain SCADA-related costs are included in the FY2002 budget, a factor in the power repayment study (PRS) which Western expects to be the basis for an adjustment to the SLCA/IP firm power rate.

Pursuant to Section 5(a) of the Agreement, CREDA hereby presents to you its disagreement with Western over the issues of allocation and inclusion of costs (historical and future, capital and O&M) associated with SCADA systems. In Western's latest (May 10, 2000) response to CREDA's comments as part of the work program process, Western advised that there appears to be agreement among its representatives "that a combination of SCADA points and breakers are the most fair way to allocate SCADA costs, and all future SCADA enhancements will use that methodology...". The May 10 response also advises that work groups were established to accomplish further studies in this area, and that options regarding the distribution of historical costs are being forwarded to the three Senior Managers for their decision.

This dispute arises because CREDA is unable to determine at this juncture whether the proposed "new" combination of SCADA points and breakers are a fair and reasonable methodology to be used to allocate certain costs to CRSP contractors. Other than the above referenced (May 10, 2000) statement, CREDA has been provided no additional detail. Further, CREDA disagrees that it is appropriate to allocate \$80,000 per year over a ten year period to CRSP representing SCADA capital costs post-transformation, when we are advised CRSP contractors paid for a SCADA system pre-transformation.

In order to comply with the time periods set out in the Agreement, CREDA is compelled to present this matter to you in accordance with the timeframe established in the Agreement. CREDA understands that discussions are ongoing, but the response provided on May 10, 2000 leads us to the conclusion that we have a dispute which requires resolution under the Agreement. Attached are some of CREDA's previous questions and comments on this matter. Because we are facing a rate adjustment process, we feel it imperative to proceed strictly in accordance with the Agreement.

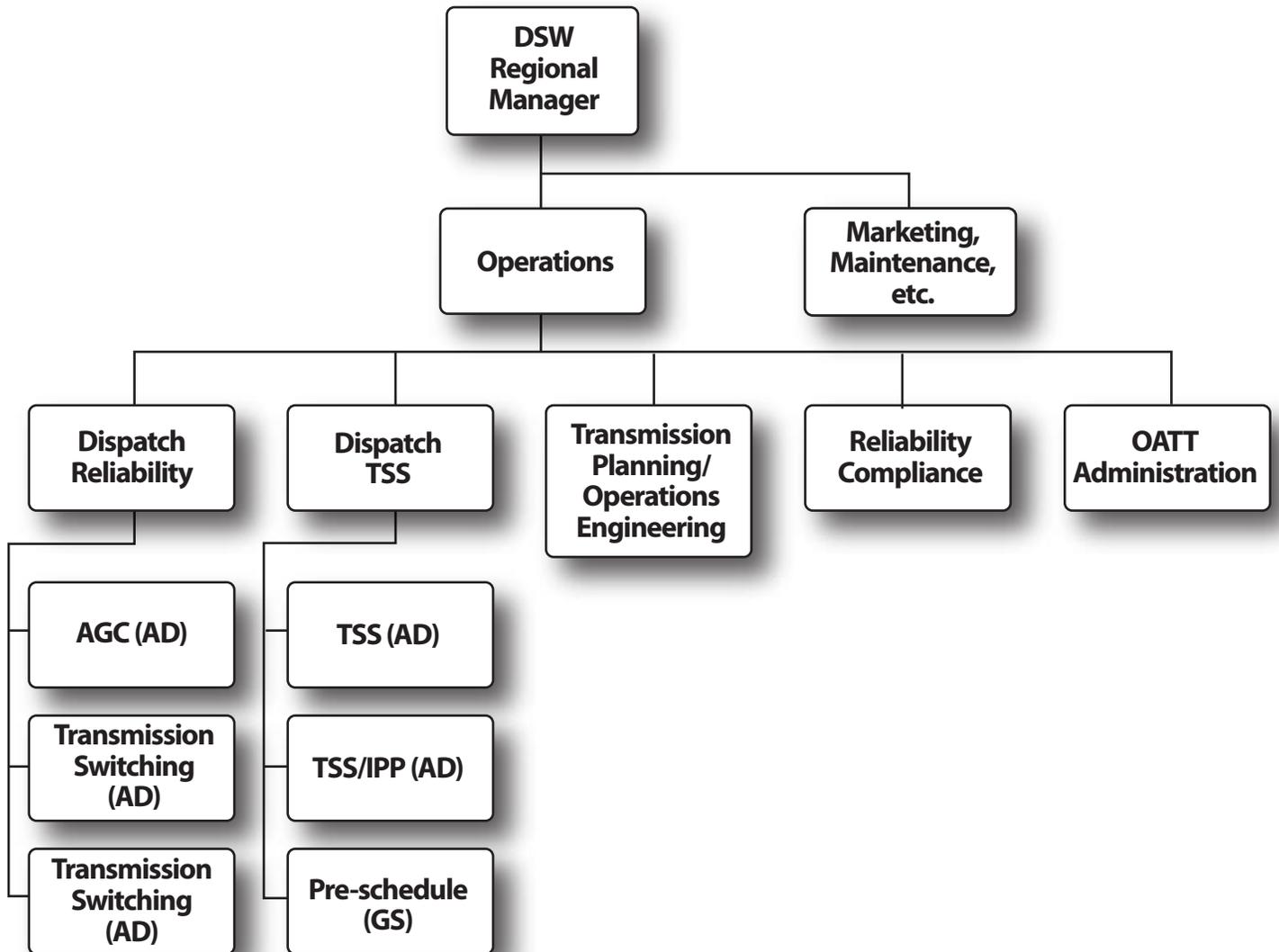
In the event CREDA believes these issues are not satisfactorily resolved, CREDA desires to resolve the dispute through arbitration, although CREDA is not opposed to exploring other forms of alternative dispute resolution. We welcome the opportunity to discuss this matter with you further. CREDA remains committed to working with Western to resolve these issues and to develop allocation methodologies that are fair and appropriate. Please don't hesitate to contact me at (480) 557-0987.

Sincerely,  
*/s/*  
Leslie James  
Executive Director

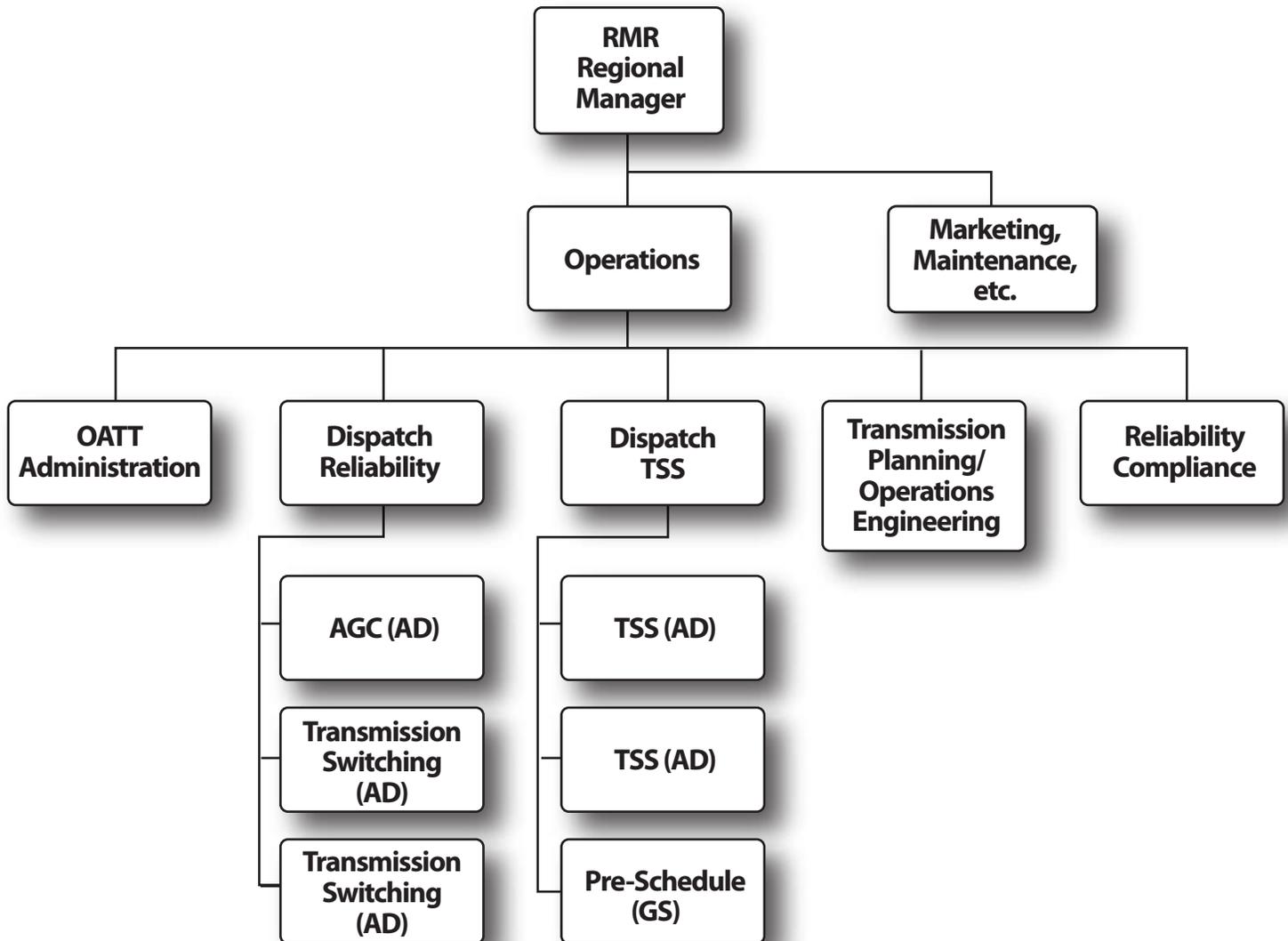
## Staffing Comparisons Option Matrix

Option	A	B	C	D
	Existing Structure	Existing plus regulatory staff	RMR, DSW back each other up	RMR & DSW Consolidated
Communications (additional only)			2	2
SCADA	18	18	16	16
IT	12.6	12.6	14	14
Operations	81	89	84	84
<b>RMR Dispatch Desks</b>	<b>5</b>	<b>5</b>	<b>5</b>	<b>5</b>
<b>DSW Dispatch Desks</b>	<b>5</b>	<b>5</b>	<b>4</b>	<b>4</b>
Transmission Services	36.5	42.5	42.5	38
<b>Total</b>	<b>148.1</b>	<b>162.1</b>	<b>158.5</b>	<b>154</b>
<b>Difference from A</b>	<b>Base</b>	<b>14</b>	<b>10.4</b>	<b>5.9</b>
<b>Difference from B</b>	<b>-14</b>	<b>Base</b>	<b>-3.6</b>	<b>-8.1</b>

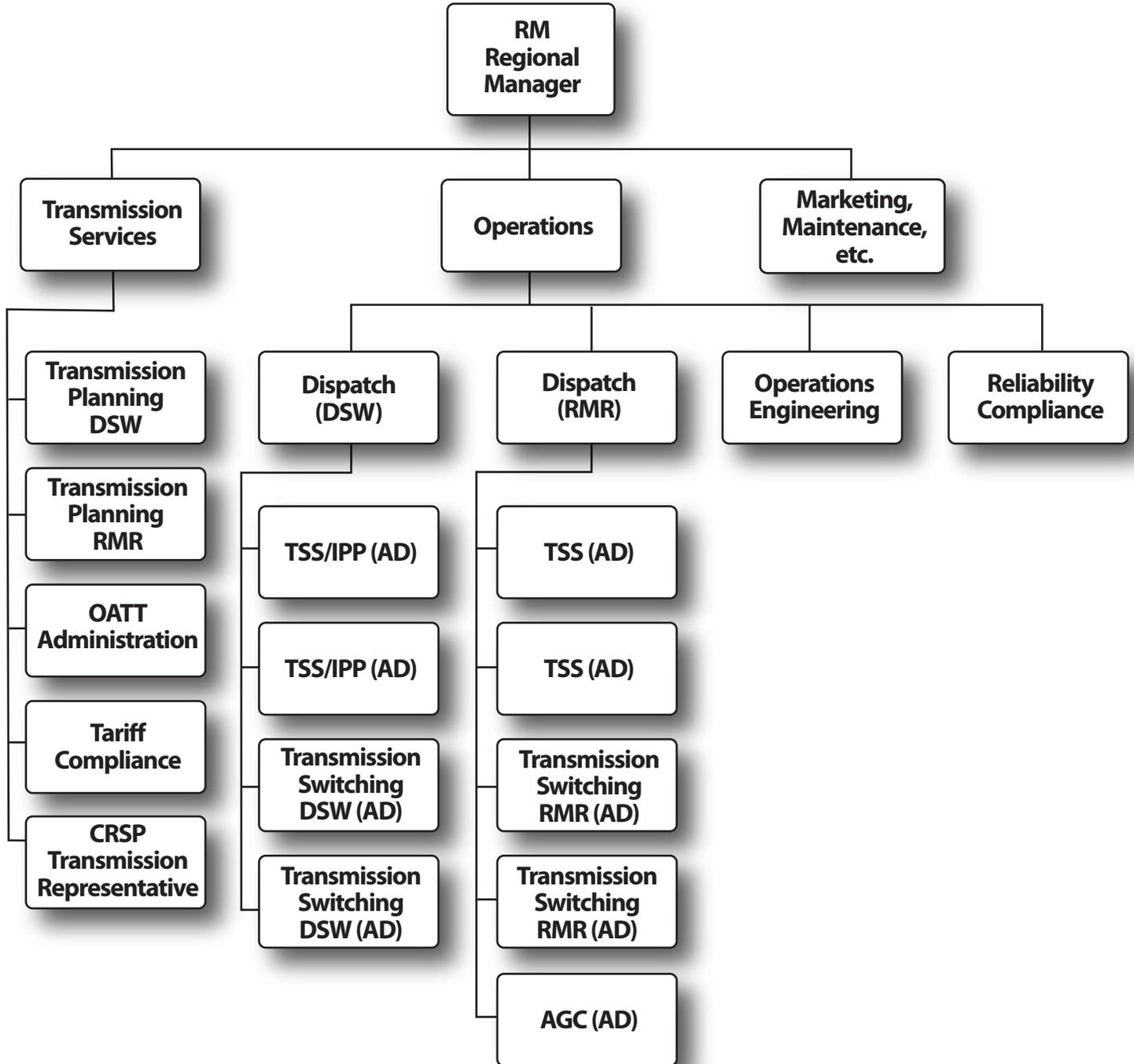
## Existing DSW Organizational Structure



## Existing RMR Organizational Structure



## Proposed Consolidated Organizational Structure (includes DSW and RMR)



## Operations Consolidation Cost Estimate Spreadsheet

Based on a OCCES ten-year study						
Options	Assumptions	FTE	Change in Annual Costs from Option B	Change in Annualized One-Time Costs from Option B	Annualized One-Time Costs	Total of Annualized Cost Changes Compared to Option B (in millions)
<b>A. Existing Structure</b>	3- BAs, 5-Desks DSW, 5-Desks RMR	148.1	-\$1.8	\$0.0	\$3.3	-\$1.8
	FTE delta from Option B.	-14.0				
<b>B. Existing Plus Regulatory Staff</b>	3-BAs, 5-Desks DSW, 5-Desks RMR, (additional FTE for regulatory compliance)	162.1	\$0.0	\$0.0	\$3.3	\$0.0
	FTE baseline	0.0				
<b>C. RMR, DSW Back Each Other Up (Operations Consolidation)</b>	3-BAs, 5-Desks DSW, 4-Desks RMR, Common Tools, Common SCADA, Settlements in FPP, Operations Reorganization	158.5	-\$1.1	-\$1.0	\$2.3	-\$2.1
	FTE delta from Option B.	-3.6				
<b>D. RMR and DSW Consolidated (BA Consolidation)</b>	1-BA, 5-Desks DSW, 4-Desks RMR, Settlements in Operations, Operations Reorganization	154	-\$1.5	-\$1.0	\$2.3	-\$2.5
	FTE delta from Option B.	-8.1				

### Summary of Cost Estimates

Customer Meeting Info									
Net Amounts				Gross Amounts for One-time Funding (Capital + One Time Expensed)					
Change in Annual Costs from Existing Structure*				Change in One-Time Costs from Existing Structure*					Total One-time funding
	FTE	Non-FTE			Communication	SCADA	Tools	Facility	
(\$M)	(\$M)	(\$M)		(\$M)	(\$M)	(\$M)	(\$M)	(\$M)	(\$M)
A. Existing Structure	\$0.0	\$0.0	\$0.0	\$0.0	\$17.380	\$0	\$0		\$17.380
B. Existing plus regulatory staff	\$1.9	\$1.9	\$0.0	\$0.0	\$17.380	\$0	\$0		\$17.380
C. RMR, DSW back each other up (Ops Consolidation)	\$1.8	\$1.4	\$0.4	\$6.9	\$22.48	\$1.505	\$0.280		\$24.265
D. RMR and DSW Consolidated (BA Consolidation)	\$1.2	\$0.9	\$0.3	\$6.6	\$22.48	\$1.205	\$0.280		\$23.965

- A. Existing Structure
- B. Existing plus regulatory staff
- C. RMR, DSW back each other up (Ops Consolidation)
- D. RMR and DSW Consolidated (BA Consolidation)

Revised Cost Info**									
Net Amounts				Gross Amounts for One-time Funding (Capital + One Time Expensed)					
Change in Annual Costs from Existing Structure				Change in One-Time Costs from Existing Structure					Total One-time funding
	FTE	Non-FTE			Communication	SCADA	Tools	Facility	
(\$M)	(\$M)	(\$M)		(\$M)	(\$M)	(\$M)	(\$M)	(\$M)	(\$M)
A. Existing Structure	\$0.0	\$0	\$0	\$0.0	\$20.139	\$12.020	\$0.688	\$2.500	\$35.347
B. Existing plus regulatory staff	\$1.8	\$1.8	\$0	\$0.0	\$20.139	\$12.020	\$0.688	\$2.500	\$35.347
C. RMR, DSW back each other up (Ops Consolidation)	\$0.7	\$1.4	(\$0.7)	(\$9.6)	\$21.932	\$3.420	\$0.370	\$0.000	\$25.722
D. RMR and DSW Consolidated (BA Consolidation)	\$0.3	\$1.0	(\$0.7)	(\$9.7)	\$21.932	\$3.320	\$0.370	\$0.000	\$25.622

- A. Existing Structure
- B. Existing plus regulatory staff
- C. RMR, DSW back each other up (Ops Consolidation)
- D. RMR and DSW Consolidated (BA Consolidation)

Annualized Revised Cost Info**									
Net Amounts				Annualized Amounts for One-time Funding (Capital + One Time Expensed)					
Change in Annual Costs from Existing Structure			Total Change in Annualized Costs	Change in One-Time Costs from Existing Structure					Total One-time funding
	FTE	Non-FTE			Communication	SCADA	Tools	Facility	
(\$M)	(\$M)	(\$M)	(\$M)	(\$M)	(\$M)	(\$M)	(\$M)	(\$M)	(\$M)
(a)			(a) + (b)	(b)					
A. Existing Structure	\$0.0	\$0.0	\$0.0	\$0.0	\$1.723	\$1.356	\$0.078	\$0.137	\$3.294
B. Existing plus regulatory staff	\$1.8	\$1.8	\$0	\$1.8	\$1.723	\$1.356	\$0.078	\$0.137	\$3.294
C. RMR, DSW back each other up (Ops Consolidation)	\$0.7	\$1.4	(\$0.7)	(\$0.3)	\$1.876	\$0.386	\$0.042	\$0.000	\$2.304
D. RMR and DSW Consolidated (BA Consolidation)	\$0.3	\$1.0	(\$0.7)	(\$0.7)	\$1.876	\$0.375	\$0.042	\$0.000	\$2.293

- A. Existing Structure
- B. Existing plus regulatory staff
- C. RMR, DSW back each other up (Ops Consolidation)
- D. RMR and DSW Consolidated (BA Consolidation)

Annualized Revised Cost Info with Comparison to Option B**										
Net Amounts				Annualized Amounts for One-time Funding (Capital + One Time Expensed)						
Change in Annual Costs from Option B			Total Change in Annualized Costs	Change in One-Time Costs from Option B					Total One-time funding	
	FTE	Non-FTE			Communication	SCADA	Tools	Facility		
(\$M)	(\$M)	(\$M)	(\$M)	(\$M)	(\$M)	(\$M)	(\$M)	(\$M)	(\$M)	
(a)			(a) + (b)	(b)						
A. Existing Structure	(\$1.8)	(\$1.8)	\$0.0	(\$1.8)	\$0.0	\$1.723	\$1.356	\$0.078	\$0.137	\$3.294
B. Existing plus regulatory staff	\$0.0	\$0.0	\$0.0	\$0.0	\$1.723	\$1.356	\$0.078	\$0.137	\$3.294	
C. RMR, DSW back each other up (Ops Consolidation)	(\$1.1)	(\$0.4)	(\$0.7)	(\$2.1)	(\$1.0)	\$1.876	\$0.386	\$0.042	\$0.000	\$2.304
D. RMR and DSW Consolidated (BA Consolidation)	(\$1.5)	(\$0.8)	(\$0.7)	(\$2.5)	(\$1.0)	\$1.876	\$0.375	\$0.042	\$0.000	\$2.293

- A. Existing Structure
- B. Existing plus regulatory staff
- C. RMR, DSW back each other up (Ops Consolidation)
- D. RMR and DSW Consolidated (BA Consolidation)

\* - Net amounts below as shown in Customer Presentation

\*\* - Revised amounts based on a review of affected functional areas over a ten-year period.

## TOTAL COSTS

<i>Total w/o Consolidation</i>	Project	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	Total
<b>Annual DSW Costs w/o Consolidation</b>	<b>PD</b>	\$ 363	\$ 369	\$ 375	\$ 382	\$ 388	\$ 395	\$ 402	\$ 410	\$ 417	\$ 425	\$ 3,926
	<b>CRSP</b>	\$ 139	\$ 141	\$ 144	\$ 146	\$ 149	\$ 152	\$ 154	\$ 157	\$ 160	\$ 163	\$ 1,506
	<b>INT</b>	\$ 104	\$ 106	\$ 107	\$ 109	\$ 111	\$ 113	\$ 115	\$ 117	\$ 119	\$ 122	\$ 1,124
	<b>BC</b>	\$ 79	\$ 80	\$ 96	\$ 81	\$ 82	\$ 101	\$ 84	\$ 85	\$ 86	\$ 87	\$ 861
	<b>CAP</b>	\$ 73	\$ 74	\$ 90	\$ 75	\$ 76	\$ 94	\$ 78	\$ 79	\$ 80	\$ 81	\$ 800
<i>Total Annual DSW Costs w/o Consolidation</i>		\$ 757	\$ 769	\$ 812	\$ 794	\$ 807	\$ 855	\$ 834	\$ 848	\$ 862	\$ 877	\$ 8,217
<b>Annual RMR Costs w/o Consolidation</b>	<b>LAP</b>	\$ 298	\$ 307	\$ 316	\$ 326	\$ 336	\$ 345	\$ 356	\$ 366	\$ 377	\$ 387	\$ 3,414
	<b>CRSP</b>	\$ 123	\$ 127	\$ 130	\$ 134	\$ 138	\$ 142	\$ 147	\$ 151	\$ 156	\$ 160	\$ 1,409
<i>Total Annual RMR Costs w/o Consolidation</i>		\$ 421	\$ 434	\$ 447	\$ 460	\$ 474	\$ 488	\$ 502	\$ 517	\$ 532	\$ 548	\$ 4,823
<i>Total Annual UGP Costs w/o Consolidation</i>	<b>PS</b>	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
<i>Total Annual Costs w/o Consolidation</i>		\$ 1,179	\$ 1,203	\$ 1,259	\$ 1,254	\$ 1,281	\$ 1,343	\$ 1,336	\$ 1,365	\$ 1,395	\$ 1,425	\$ 13,039
<b>One-time Expensed DSW Costs w/o Consolidation</b>	<b>PD</b>	\$ -	\$ 173	\$ 173	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 345
	<b>CRSP</b>	\$ -	\$ 66	\$ 66	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 132
	<b>INT</b>	\$ -	\$ 50	\$ 50	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 99
	<b>BC</b>	\$ -	\$ 22	\$ 22	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 44
	<b>CAP</b>	\$ -	\$ 20	\$ 20	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 40
<i>Total One-time Expensed DSW Costs w/o Consolidation</i>		\$ -	\$ 330	\$ 330	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 660
<b>One-time Expensed RMR Costs w/o Consolidation</b>	<b>LAP</b>	\$ -	\$ 162	\$ 162	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 324
	<b>CRSP</b>	\$ -	\$ 73	\$ 73	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 146
<i>Total One-time Expensed RMR Costs w/o Consolidation</i>		\$ -	\$ 235	\$ 235	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 470
<i>Total One-time Expensed UGP Costs w/o Consolidation</i>	<b>PS</b>	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
<i>Total One-time Expensed Costs w/o Consolidation</i>		\$ -	\$ 565	\$ 565	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,130
<b>One-time Cap. DSW Costs w/o Consolidation</b>	<b>PD</b>	\$ 301	\$ 569	\$ 392	\$ 261	\$ 261	\$ 405	\$ 261	\$ 261	\$ 261	\$ 261	\$ 3,233
	<b>CRSP</b>	\$ 100	\$ 100	\$ 1,175	\$ 1,124	\$ 868	\$ 156	\$ 100	\$ 100	\$ 100	\$ 100	\$ 3,923
	<b>INT</b>	\$ 75	\$ 193	\$ 112	\$ 75	\$ 75	\$ 116	\$ 75	\$ 75	\$ 75	\$ 75	\$ 946
	<b>BC</b>	\$ 25	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 25
	<b>CAP</b>	\$ 25	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 25
<i>Total One-time Cap. DSW Costs w/o Consolidation</i>		\$ 526	\$ 862	\$ 1,679	\$ 1,460	\$ 1,204	\$ 677	\$ 436	\$ 436	\$ 436	\$ 436	\$ 8,152
<b>One-time Cap. RMR Costs w/o Consolidation</b>	<b>LAP</b>	\$ 390	\$ 1,030	\$ 530	\$ 1,219	\$ 1,910	\$ 1,170	\$ 420	\$ 170	\$ 430	\$ 670	\$ 7,939
	<b>CRSP</b>	\$ -	\$ 220	\$ 510	\$ 1,120	\$ 1,223	\$ 2,500	\$ 2,000	\$ 2,000	\$ -	\$ -	\$ 9,573
<i>Total One-time Cap. RMR Costs w/o Consolidation</i>		\$ 390	\$ 1,250	\$ 1,040	\$ 2,339	\$ 3,133	\$ 3,670	\$ 2,420	\$ 2,170	\$ 430	\$ 670	\$ 17,512
<i>One-time Cap. UGP Costs w/o Consolidation</i>	<b>PS</b>	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
<i>Total One-time Cap. Costs w/o Consolidation</i>		\$ 916	\$ 2,112	\$ 2,719	\$ 3,799	\$ 4,337	\$ 4,347	\$ 2,856	\$ 2,606	\$ 866	\$ 1,106	\$ 25,664
<b>Annual DSW ACC Costs</b>	<b>PD</b>	\$ 41	\$ 42	\$ 44	\$ 45	\$ 46	\$ 48	\$ 49	\$ 51	\$ 52	\$ 54	\$ 473
	<b>CRSP</b>	\$ 16	\$ 16	\$ 17	\$ 17	\$ 18	\$ 18	\$ 19	\$ 20	\$ 20	\$ 21	\$ 182
	<b>INT</b>	\$ 12	\$ 12	\$ 13	\$ 13	\$ 13	\$ 14	\$ 14	\$ 15	\$ 15	\$ 15	\$ 135
	<b>BC</b>	\$ 28	\$ 28	\$ 29	\$ 29	\$ 29	\$ 29	\$ 29	\$ 29	\$ 30	\$ 30	\$ 290
	<b>CAP</b>	\$ 27	\$ 27	\$ 27	\$ 27	\$ 27	\$ 28	\$ 28	\$ 28	\$ 28	\$ 28	\$ 276
<i>Total Annual DSW ACC Costs</i>		\$ 124	\$ 126	\$ 129	\$ 131	\$ 134	\$ 136	\$ 139	\$ 142	\$ 145	\$ 148	\$ 1,355
<b>Annual RMR ACC Costs</b>	<b>LAP</b>	\$ 94	\$ 97	\$ 99	\$ 102	\$ 105	\$ 108	\$ 111	\$ 114	\$ 117	\$ 121	\$ 1,068











## Operations Tools

<i>Operations Tools w/o Consolidation</i>	Project	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	Total
<b>Annual DSW Costs w/o Consolidation</b>	<b>PD</b>	\$ 206	\$ 212	\$ 218	\$ 225	\$ 231	\$ 238	\$ 245	\$ 253	\$ 260	\$ 268	\$ 2,356
	<b>CRSP</b>	\$ 79	\$ 81	\$ 84	\$ 86	\$ 89	\$ 92	\$ 94	\$ 97	\$ 100	\$ 103	\$ 906
	<b>INT</b>	\$ 59	\$ 61	\$ 62	\$ 64	\$ 66	\$ 68	\$ 70	\$ 72	\$ 74	\$ 77	\$ 674
	<b>BC</b>	\$ 26	\$ 27	\$ 27	\$ 28	\$ 29	\$ 30	\$ 31	\$ 32	\$ 33	\$ 34	\$ 297
	<b>CAP</b>	\$ 24	\$ 25	\$ 26	\$ 26	\$ 27	\$ 28	\$ 29	\$ 30	\$ 31	\$ 32	\$ 278
<i>Total Annual DSW Costs w/o Consolidation</i>		\$ 393	\$ 405	\$ 417	\$ 430	\$ 443	\$ 456	\$ 470	\$ 484	\$ 498	\$ 513	\$ 4,511
<b>Annual RMR Costs w/o Consolidation</b>	<b>LAP</b>	\$ 233	\$ 240	\$ 247	\$ 255	\$ 263	\$ 270	\$ 279	\$ 287	\$ 296	\$ 304	\$ 2,674
	<b>CRSP</b>	\$ 123	\$ 127	\$ 130	\$ 134	\$ 138	\$ 142	\$ 147	\$ 151	\$ 156	\$ 160	\$ 1,409
<i>Total Annual RMR Costs w/o Consolidation</i>		\$ 356	\$ 367	\$ 378	\$ 389	\$ 401	\$ 413	\$ 425	\$ 438	\$ 451	\$ 465	\$ 4,083
<i>Total Annual UGP Costs w/o Consolidation</i>	<b>PS</b>	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
<i>Total Annual Costs w/o Consolidation</i>		\$ 750	\$ 772	\$ 795	\$ 819	\$ 844	\$ 869	\$ 895	\$ 922	\$ 950	\$ 978	\$ 8,593
<b>One-time Expensed DSW Costs w/o Consolidation</b>	<b>PD</b>	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	<b>CRSP</b>	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	<b>INT</b>	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	<b>BC</b>	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	<b>CAP</b>	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
<i>Total One-time Expensed DSW Costs w/o Consolidation</i>		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
<b>One-time Expensed RMR Costs w/o Consolidation</b>	<b>LAP</b>	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	<b>CRSP</b>	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
<i>Total One-time Expensed RMR Costs w/o Consolidation</i>		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
<i>Total One-time Expensed UGP Costs w/o Consolidation</i>	<b>PS</b>	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
<i>Total One-time Expensed Costs w/o Consolidation</i>		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
<b>One-time Cap. DSW Costs w/o Consolidation</b>	<b>PD</b>	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	<b>CRSP</b>	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	<b>INT</b>	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	<b>BC</b>	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	<b>CAP</b>	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
<i>Total One-time Cap. DSW Costs w/o Consolidation</i>		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
<b>One-time Cap. RMR Costs w/o Consolidation</b>	<b>LAP</b>	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	<b>CRSP</b>	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
<i>Total One-time Cap. RMR Costs w/o Consolidation</i>		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
<i>One-time Cap. UGP Costs w/o Consolidation</i>	<b>PS</b>	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
<i>Total One-time Cap. Costs w/o Consolidation</i>		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
<b>Annual DSW ACC Costs</b>	<b>PD</b>	\$ 41	\$ 42	\$ 44	\$ 45	\$ 46	\$ 48	\$ 49	\$ 51	\$ 52	\$ 54	\$ 473
	<b>CRSP</b>	\$ 16	\$ 16	\$ 17	\$ 17	\$ 18	\$ 18	\$ 19	\$ 20	\$ 20	\$ 21	\$ 182
	<b>INT</b>	\$ 12	\$ 12	\$ 13	\$ 13	\$ 13	\$ 14	\$ 14	\$ 15	\$ 15	\$ 15	\$ 135
	<b>BC</b>	\$ 5	\$ 5	\$ 6	\$ 6	\$ 6	\$ 6	\$ 6	\$ 6	\$ 7	\$ 7	\$ 60
	<b>CAP</b>	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5	\$ 6	\$ 6	\$ 6	\$ 6	\$ 6	\$ 56
<i>Total Annual DSW ACC Costs</i>		\$ 79	\$ 81	\$ 84	\$ 86	\$ 89	\$ 91	\$ 94	\$ 97	\$ 100	\$ 103	\$ 905
<b>Annual RMR ACC Costs</b>	<b>LAP</b>	\$ 87	\$ 90	\$ 92	\$ 95	\$ 98	\$ 101	\$ 104	\$ 107	\$ 110	\$ 114	\$ 998
	<b>CRSP</b>	\$ 46	\$ 47	\$ 49	\$ 50	\$ 52	\$ 53	\$ 55	\$ 56	\$ 58	\$ 60	\$ 525
<i>Total Annual RMR ACC Costs</i>		\$ 133	\$ 137	\$ 141	\$ 145	\$ 150	\$ 154	\$ 159	\$ 163	\$ 168	\$ 173	\$ 1,523















