

WEST DES MOINES WATER WORK BOARD OF TRUSTEES MEETING COMMUNICATION

ITEM:

DATE: April 16, 2018

6. Recommendations from Committees

. Planning and Regionalization

1. Motion -

Approving and Authorizing Execution of a Proposal and Scope of Service with FCS Group for Phase 2 Study of Regionalization of

Water Production Utility

FINANCIAL IMPACT:

Total contract cost is not-to-exceed \$200,000. West Des Moines Water Works portion of the expense is one-third (1/3) of the cost, \$66,667. The remaining share will be equally divided between Des Moines Water Works and Urbandale Water Utility.

SUMMARY:

These actions will provide continued facilitation services from Jason Mumm of FCS Group for the Phase 2 study of regionalization of water production facilities in the Des Moines Metro area. Representatives from cities and water utilities within the Metro area have been meeting in workshops and public forums since October 2017. The result of these meetings has been the development of a draft Memorandum of Understanding (MOU). The MOU is currently under an iterative process of review and editing before the future development of a 28E/F. During the workshop discussions, it became evident that a financial analysis for each entity would be vital information when determining whether or not to enter a regional utility. The proposed scope of service for Phase 2 concentrates on the financial analysis and will provide information on future costs for each community under status quo, regionalized production and expanded independent production scenarios.

BACKGROUND:

The idea of regionalization of water production in the Des Moines metro area has been discussed for a number of years. FCS Group has been working closely with metro city and utility leaders to develop an MOU for future development into a 28E/F. It is anticipated that the financial analysis will be finalized in August 2018. Further development of the 28E/F would occur after Phase 2 work is completed.

RECOMMENDED ACTION BY THE BOARD OF TRUSTEES:

To concur with recommendation of the Planning and Regionalization Committee
and approve and authorize execution of a proposal and scope of service with
FCS Group for Phase 2 study of regionalization of water production utility.

Prepared by: ________

Approved for Content by:



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March 12, 2018

Central Iowa Regional Water Workgroup Attn: Susan Huppert, Jody Smith, and John McCune

Subject: FCS Group Proposal for Phase 2 Services

Dear Ms. Huppert, Mr. Smith, and Mr. McCune:

It has been our pleasure and great privilege to work with you and the Central Iowa Regional Water Workgroup these past few months in creating a vision for a regional water production Authority. The new Authority, as proposed today, would consolidate the essential functions of water production in the region, merging the best of region's production assets, human resources, and regional thinking. The benefits achieved from regionalization should also include a compelling economic case for lower water production costs compared to expectations under the status quo. The attached proposal is our estimate for completing a scope of work that will answer this important question for each of the communities expected to become part of the proposed, new regional Authority.

In completing the proposed scope of work, we expect to ask and answer the following key questions:

- 1. What are the water production costs for each community assuming there is no regional Authority and operations continue as they are today?
- 2. What are the costs for the regional Authority and what would it likely charge as a wholesale rate to individual communities all things considered?
- 3. What are the likely costs for each community assuming water production services are provided by the Authority?
- 4. For each community, how do the expected future costs compare with and without the regional Authority?

In addition to addressing these key remaining issues, the proposed scope also provides for ongoing assistance in completing the draft MOU and 28E/F agreement; conducting monthly workshop-style meetings with the Workgroup to report on our progress and address issues as they arise; and documentation of the various findings and recommendations along the way. A detailed budget and schedule is provided in our proposal.

If you have any questions at all about this proposal, please call me at (303)652-7548, my direct line.

Sincerely,

FCS GROUP

Jason Mumm



TABLE OF CONTENTS

Description of Phase 2	<i>'</i>
Background	1
Overall Objectives	1
Key Questions Answered in Phase 2	1
Additional Services	2
Scope of Work	3
Task 1 – Information Acquisition	
Task 2 – Consolidating Key Assumptions	3
Task 3 – Forecasting the Status Quo Case	
Task 4 – Authority Cost Sharing Framework	4
Task 5 – Forecast the Regional Authority Case	5
Task 6 – Additional Support Services	6
Budget Summary	7
Labor Resources	8
Attachments	C

DESCRIPTION OF PHASE 2

Background

FCS GROUP has been working with the Central Iowa Regional Water Workgroup (Workgroup) since September 2017 to assist in envisioning and documenting a framework for regional water production for Des Moinesarea communities. Through a series of workshops, the Workgroup expressed its vision for formation of a separate regional water Authority that would: assume ownership of all existing regional water production assets; provide for the current and future water supply needs of its regional members; finance future expansions and improvements to the water production infrastructure; and govern its affairs with representation from each of its member communities. These tenets of the regional vision, along with additional provisions, were outlined in a draft memorandum of understanding (MOU) circulated to members of the Workgroup on January 8, 2018.

The full details of the regional vision will continue to evolve as members review the MOU, but many important economic questions remain. Part of the regional vision, as expressed succinctly by many of the Workgroup members, is the creation of various scale efficiencies. These efficiencies are expected to create economic benefits resulting in decreasing unit costs when compared to the current model for delivery of water production services. Such a comparison was not feasible for FCS GROUP to address during the first phase of our engagement, but will be addressed here, in Phase 2.

Overall Objectives

The objective for Phase 2 is to provide each community interested in becoming a member of the proposed Authority with the financial/economic case for regionalization. With the results of our analyses in Phase 2, communities will have a clear and demonstrable comparison of the average cost per unit of delivered water with and without the presence of a regional Authority.

Key Questions Answered in Phase 2

In order to provide communities with the information needed to make a rational comparison of costs, our scope of work will ask and answer the following crucial questions:

- What are the water production costs for each community assuming there is no regional Authority and operations continue as they are today?
- What are the costs for the regional Authority and what would it likely charge as a wholesale rate to individual communities all things considered?
- What are the likely costs for each community assuming water production services are provided by the Authority?
- For each community, how do the expected future costs compare with and without the regional Authority?



Additional Services

In addition answering the key questions listed above, our proposed services will also provide additional support for the Workgroup as it continues to refine its vision for the Authority. These services involve assistance with drafting and completing the MOU, the 28E/F agreement, and conducting monthly workshop-style meetings with the Workgroup to report on our Phase 2 status and address any issues that arise during the course of our work.



SCOPE OF WORK

Task 1 – Information Acquisition

Estimated Timing: April

The scope of work in Phase 2 will require detailed financial and water planning input from several communities (not all). We have grouped communities into a few categories to help in organizing the nature of our information gathering and our analysis in general. Communities may fall into more than one of the below categories and may have different levels and types of physical and/or purchased capacity.

Producers – those communities/agencies who currently own water production assets.

Potential Producers – those communities/agencies who have considered constructing their own production facilities or intend to consider it in the future.

Wholesale Buyers – those communities/agencies who expect to purchase produced water and distribute it through their

produced water and distribute it through their own local distribution systems.

Retail Contracts - those

communities/agencies who receive full service under contract from one or more of the above.

In Task 1, we will prepare a written information request for communities tailored to their category(ies). We have allotted a 2-week response period during which time we need each community to provide a comprehensive response to our requests. The information received from the communities will make up a significant portion of the inputs to all subsequent analyses and the quality of the responses is therefore critical to the outcomes produced in Phase 2.

After our review of the materials received, we will follow up with individual communities/agencies as needed for any additional requests.

Task 2 – Consolidating Key Assumptions

Expected Timing: May

The analyses in Phase 2 will depend on certain key assumptions about future expectations. As a separate task, we will consolidate those key assumptions into central repository that will be linked to the subsequent forecast models. Doing so helps ensure that the subsequent analyses use the key assumptions consistently, and that any changes to those assumptions can be incorporated into those analyses quickly and accurately. Some of the key assumptions we will address in this task:

- Consolidation of demand and growth forecasts. We intend to take both demand and growth forecasts from the long-range plan recently completed for DMWW by HDR Engineering (LRP).
- Quantification and categorization of investments outlined in the long-range plan. We will work with DMWW and others to categorize the capital projects identified in the LRP to distinguish them between water production vs. other investments, and between new capacities vs. upgrade/repair of existing capacity.
- Identification of the nature, timing, and cost of new production for the Potential Producers. Quantifying the expected investment in alternative water production facilities as envisioned by those communities who self-identify as Potential Producers.
- Determination of simplified cost allocation rules. To the extent necessary, developing simple rules to apply in forecasting that separates existing communities' costs between water production and other needs.
- Cost-based price for reserve capacity.
 We will review the materials provided in

previous studies, and those analyses we prepared in Phase 1 to identify a range of reasonable assumptions to use for the price per MGD of reserve capacity.

Once complete, we will prepare consolidated tables and data warehouses and make them available as reference and review throughout our engagement.

Task 3 – Forecasting the Status Quo Case

Expected Timing: June-July

The first analytical task is to prepare a series of forecasts representing the expected water production costs for the communities/agencies assuming the current delivery model for water production services (i.e. without a regional Authority as envisioned in the MOU). We expect to create financial forecasts for communities/agencies categorized as Producers, Potential Producers, and Wholesale Buyers. Customers categorized as Retail Contracts will not require a separate forecast but will instead have a cost/rate projection derived from their respective provider's forecast. In order to keep all forecasts on an equivalent basis across multiple agencies (thus making them comparable later on), we will need to standardize the methodology used to depict costs, especially capital costs.

Task 3 will include the following major subtasks:

- Projection of water production operating costs and/or purchased water expenses.
 Either from already known expenses or information provided from the information requested in Task 1. We will work with individual agencies to create a reasonable allocation where necessary between water production costs and distribution costs.
- Projection of capital costs related to existing assets and proposed future CIP investments. We will use the Long-Range Plan with assumptions developed in Task 2 as an assumed input for regional

capacity additions and improvements. We will augment this information where needed to reflect plans for Producers and Potential Producers. We will forecast capital costs in all cases as a function of asset depreciation expense and reasonable (uniform) rate of return on asset values (known as the *utility approach* in utility rate making terminology). We will work to make sure this approach is applied consistently in all cases.

 Determination of average cost per unit of demand (per 1,000 gallons and per MGD). After calculating total revenue requirements in previous subtasks, divide the total cost by the units of demand to arrive at the average cost per unit.

We will prepare a series of exhibits demonstrating the above inputs and calculations and a narrative project memorandum to provide formal documentation of our findings.

Task 4 – Authority Cost Sharing Framework

Expected Timing: June-July

We will develop a working cost-sharing model for the Authority consistent with the MOU and previous workshop discussions. The cost-sharing framework needs to provide for an overall allocation of the Authority's expected costs and should address the Authority's purchase of reserve, financing of new capacity, contributions of capital assets to the Authority (a credit), and other cost allocation issues.

This task will specifically examine alternatives and strategies for:

 Addressing the costs of expanding capacity. We will examine alternatives for growth-related charges/fees to recover the cost of expanding capacity from those communities exhibiting the highest growth.

- Purchase of Reserve Capacity. The price at which the Authority will acquire existing reserve capacity from members will most likely come to a negotiated value. For the purposes of the Phase 2 analysis, however, we will incorporate all the applicable capital costs the members have incurred in acquiring, financing, and preserving the capacity. These costs, taken from the members' financial records, will be incorporated into the Authority's proposed cost structure. Our analysis will be structured for easy updating should the members negotiate a value apart from the costs we will have already incorporated.
- Disposition of existing debts related to water production assets. Although it is assumed the Authority will finance all future investments in water production, the question of how to address any outstanding debt related to the existing production assets is another matter that requires deliberation. We will examine outstanding bond indenture documents for each of the Producer communities to determine: a) how much outstanding debt remains; b) how much of that debt is attributable to the water production assets (as opposed to other assets); c) what restrictions, if any, exist related to transferring the assets to the Authority while the debt is outstanding; and d) what restrictions, if any, exist related to refinancing the debt. Based on these evaluations, we will develop a list of feasible alternatives for consideration in the Authority's financing structure.
- Accounting for Contributed Assets.

 Several potential members will be contributing either physical or purchased capacity to the Authority. They will either be compensated for those assets with payments by the Authority, or they will receive a "credit" for their contributions that will serve to reduce their wholesale rate (or a combination of both cash and

contribution). Since each member likely contributes a different amount to the Authority, the potential credit for the contributions will vary, and wholesale rates will vary as well. Based on the information gathered in Task 1, we will prepare a comprehensive statement of contributions.

This crucial task will evaluate the Authority's expected costs in all aspects, the allocation of those coasts, and the estimated wholesale rates for water production for each member.

We will document our findings in a formal project memorandum with all applicable tables and figures.

Task 5 – Forecast the Regional Authority Case

Expected Timing: July-August

This analysis assumes the regional Authority takes responsibility for all water production needs as anticipated in the draft MOU. As regional formation occurs, the assets and related costs are consolidated and shared with member communities in ways that are expected to differ from the status quo. Reserve capacity is made available to serve more demand which, in turn, may allow for certain changes in the timing and nature of future expansion. Operational costs once paid by a subset of regional customers would more likely be shared with all regional customers, etc. The point is that regionalization should produce economies of scale and the analysis in Task 5 needs to characterize how that takes form and how that translates into a regional wholesale rate. The following major subtasks apply:

 Re-Forecast Community/Agency Water Production Costs. This revised forecast will be compared to the forecast completed in Task 3. It will incorporate the findings from the previous subtasks, and also determine the net effect on the members' distribution charges considering the effects of: reserve capacity sales (if any), remaining water production-related debt service (if any), and any other impacts identified during the course of our evaluation. This task will result in a new projection of the average cost per unit of water production for each member to be compared with the similar findings from the status quo evaluation in Task 3.

 Compare Scenarios. We will formally combine the findings from Task 3 with Task 5 to compare the water production costs under the two scenarios for each community.

We will prepare a series of exhibits demonstrating the above inputs and calculations. These will be circulated with a project memorandum formally documenting our findings.

Task 6 – Additional Support Services

Expected Timing: Throughout

Additional support services include ongoing assistance for the following activities:

- Completion of the daft MOU. Including consolidation of comments from the communities/agencies, revisions of the document.
- Workgroup. We propose to conduct a monthly status meeting with the Workgroup throughout the completion of the scope of work. The meetings will include an update on all active tasks in the scope, as well as a forum for continuing discussion of regional issues and revision to the MOU. For budget purposes, we have allotted six (6) such meetings. These meetings will occur at scheduled times throughout the engagement.



BUDGET SUMMARY

A detailed project schedule is provided at the Attachments. Summary information about the proposed level of effort and out-of-pocket expenses is shown in the below table.

Table 1: Summary Engagement Budget

Task	Labor Hrs.	Labor Budget	Expense Budget	Total
Task 1: Information Acquisition	99	\$16,700	\$0	\$16,700
Task 2: Consolidating Key Assumptions	95	\$16,100	\$0	\$16,100
Task 3: Forecasting the Status Quo	327	\$47,900	\$0	\$47,900
Task 4. Authority Cost Sharing Framework	136	\$25,100	\$0	\$25,100
Task 5: Forecast the Regional Authority	288	\$44,100	\$0	\$44,100
Task 6: Additional Support Services	171	\$37,200	\$12,900	\$50,100
Total Labor Budget	1,116	\$187,100	\$12,900	\$200,000

- FTE Equivalent The project duration is 134 working days based on a standard calendar (with normal holidays). One full-time equivalent is 1,072 hours. Therefore, our proposal includes approximately 1.0 full-time equivalent resource for 134 work days.
- Average Labor Rate the average labor rate for all tasks is \$168 / hr.
- Expenses Airfare expenses were assumed at \$1,100 per trip, per person consistent with experience in Phase 1. Other travel expenses, including hotel, meals, and rental cars were assumed at \$250 per day/person. Travel expenses are only incurred for the planned meetings in Task 6.
- *Meetings* We planned a workshop meeting for each month of the engagement. There are six (6) total meetings in the work plan.
- Not to Exceed the budget shown in the above table is intended to be a not-to-exceed value for the scope of work described herein. Effort for individual tasks may take more or less time than budgeted due to the uncertainties involved with an engagement of this nature. However, FCS GROUP will not exceed the total amount budgeted for the scope defined herein.



Labor Resources

Phase 2 will include an expanded team of FCS GROUP consultants compared to Phase 1. All those resources involved in Phase 1 will also be involved in Phase 2. A brief summary of these individuals and their role in this engagement is included in the table below:

Table 2: FCS GROUP staff proposed for Phase 2

Name	Title	Labor Hours / Rate	Notes
Jason Mumm	Executive Consultant	214 / \$255	Engagement manager
David Gordon	Consultant	201 / \$160	Team leader (Group 1 communities)
Melanie Hobart	Consultant	154 / \$145	Team leader (Group 2 communities)
Andrew Baker	Sr. Project Manager	176 / \$180	Asst. engagement manager, lead technical consultant
Analyst Pool (2)	Analyst	371 / \$125	Analytical assistance throughout
Total		1,116 / \$168	

The key personnel named above (excluding the Analyst Pool) will be dedicated the engagement consistent with the project work plan at the attachment. FCS GROUP will not substitute key personnel without notifying you and gaining your agreement to any substitution proposed.

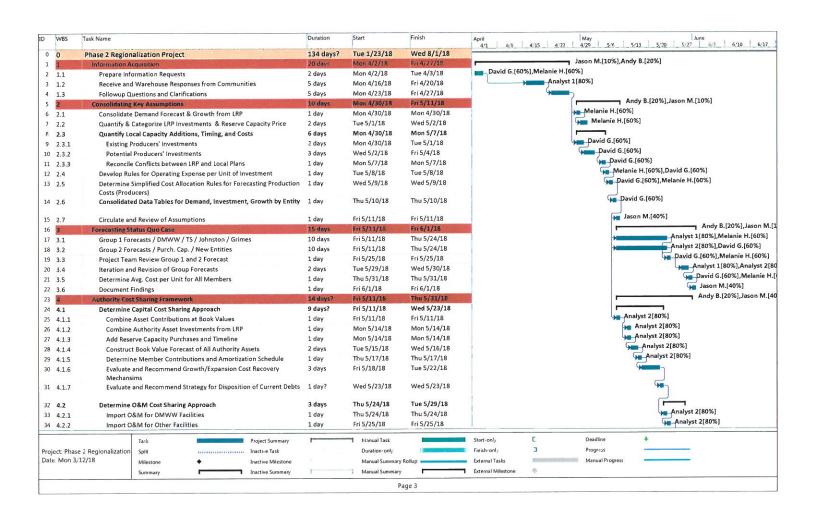


ATTACHMENTS

The attachment contained on the following pages is a detailed project work plan prepared using Microsoft Project 2013. It is best viewed electronically. However, if printing is preferred, we recommend printing the attachment on 11 x 17 paper in landscape mode.

WBS T	Task Name				Duration	Start	Finish	1/7 1/14	1/21 1/	February 28 2/4 2/11	2/18 2/25 3/4	1 3/11 3/18 3
0 0	Phase 2 Regiona	alization Project			134 days?	Tue 1/23/18	Wed 8/1/18	AL JAM	1	A9	N. 1 E.S. 1 A.	
1	Information Ad	equisition	The state of the state of		20 days	Mon 4/2/18	Fri 4/27/18					
1.1	Prepare Info	ormation Requests			2 days	Mon 4/2/18	Tue 4/3/18					
3 1.2	Receive and	Warehouse Response	es from Communi	ties	5 days	Mon 4/16/18	Fri 4/20/18	1				
4 1.3	Followup Qu	uestions and Clarificat	ions		5 days	Mon 4/23/18	Fri 4/27/18					
5 2	Consolidating	Key Assumptions			10 days	Mon 4/30/18	Fri 5/11/18					
6 2.1	Consolidate	Demand Forecast & G	Growth from LRP		1 day	Mon 4/30/18	Mon 4/30/18					
7 2.2	Quantify & C	Categorize LRP Investr	ments & Reserve	Capacity Price	2 days	Tue 5/1/18	Wed 5/2/18					
8 2.3	Quantify Lo	cal Capacity Addition:	s, Timing, and Co	sts	6 days	Mon 4/30/18	Mon 5/7/18	1				
9 2.3.1	Existing P	roducers' Investments	s		2 days	Mon 4/30/18	Tue 5/1/18					
0 2.3.2	Potential	Producers' Investmen	nts		3 days	Wed 5/2/18	Fri 5/4/18					
1 2.3.3	Reconcile	Conflicts between LR	P and Local Plans		1 day	Mon 5/7/18	Mon 5/7/18					
12 2.4	Develop Rule	es for Operating Expe	nse per Unit of In	vestment	1 day	Tue 5/8/18	Tue 5/8/18					
13 2.5	Determine S	implified Cost Allocat	ion Rules for Fore	casting Production	1 day	Wed 5/9/18	Wed 5/9/18					
	Costs (Produ	ucers)										
2.6 Consolidated Data Tables for Demand, Investment, Growth by Entity			1 day	Thu 5/10/18	Thu 5/10/18							
15 2.7	2.7 Circulate and Review of Assumptions		1 day	Fri 5/11/18	Fri 5/11/18							
6 3	Forecasting Sta	atus Quo Case			15 days	Fri 5/11/18	Fri 6/1/18					
3.1	Group 1 For	ecasts / DMWW / TS /	/ Johnston / Grime	es	10 days	Fri 5/11/18	Thu 5/24/18					
18 3.2	Group 2 Fore	ecasts / Purch. Cap. /	New Entities		10 days	Fri 5/11/18	Thu 5/24/18					
19 3.3	Project Team	n Review Group 1 and	d 2 Forecast		1 day	Fri 5/25/18	Fri 5/25/18					
20 3.4	Iteration and	d Revision of Group Fo	orecasts		2 days	Tue 5/29/18	Wed 5/30/18					
21 3.5	Determine A	Avg. Cost per Unit for	All Members		1 day	Thu 5/31/18	Thu 5/31/18	1				
22 3.6	Document F	indings			1 day	Fri 6/1/18	Fri 6/1/18		i i			
23 4	Authority Cost	Sharing Framework		AND DESCRIPTION OF THE PERSON NAMED IN	14 days?	Fri 5/11/18	Thu 5/31/18					
4.1	Determine (Capital Cost Sharing A	pproach		9 days?	Fri 5/11/18	Wed 5/23/18					
25 4.1.1 Combine Asset Contributions at Book Values			1 day	Fri 5/11/18	Fri 5/11/18							
26 4.1.2	Combine	Authority Asset Invest	tments from LRP		1 day	Mon 5/14/18	Mon 5/14/18					
27 4.1.3	Add Reser	rve Capacity Purchase	s and Timeline		1 day	Mon 5/14/18	Mon 5/14/18					
28 4.1.4	Construct	Book Value Forecast	of All Authority A	ssets	2 days	Tue 5/15/18	Wed 5/16/18	1				
29 4.1.5	Determin	e Member Contribution	ons and Amortizat	ion Schedule	1 day	Thu 5/17/18	Thu 5/17/18					
30 4.1.6	Evaluate a Mechansi	and Recommend Grov	wth/Expansion Co	st Recovery	3 days	Fri 5/18/18	Tue 5/22/18					
4.1.7		ms and Recommend Strat	tegy for Dispositio	n of Current Debts	1 day?	Wed 5/23/18	Wed 5/23/18					
2 4.2	Determine (O&M Cost Sharing Ap	proach		3 days	Thu 5/24/18	Tue 5/29/18					
33 4.2.1	Import O8	&M for DMWW Facilit	ties		1 day	Thu 5/24/18	Thu 5/24/18					
34 4.2.2	Import O	&M for Other Facilities	s		1 day	Fri 5/25/18	Fri 5/25/18	1	1			
		Task		Project Summary	r	Manual Task		Start-only	С	Deadline	+	
	Regionalization	Split		Inactive Task		Duration-only		Finish-only	3	Progress		
ate: Mon 3/12/	2/18	Milestone	•	Inactive Milestone		Manual Summary	Rollup -	External Tasks	Name and Address of the Owner, where	Manual Progress		
	1	Summary		Inactive Summary	1	Manual Summary		External Milestone	0			

1/21 1/28 2/4 2/11 2/18 2/25 3/4 3/11 3/18 3
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Jason M., Meeting 1-PerD [2 Diem]
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35 4. 36 4.	VBS	Task Name	Duration	Start	Finish	April May June
	.2.3	Estimate and Forecast Authority Org. O&M Costs	1 day	Tue 5/29/18	Tue 5/29/18	April May June 4/1 4/8 4/15 4/22 4/29 5/6 5/13 5/20 5/27 6/3 6/10 6/17 5/26 Analyst 2[80%]
		Determine Avg. Cost per Unit / Wholesale Purchase Cost - All members		Wed 5/30/18	Wed 5/30/18	Analyst 2[80 %]
37 4.	.4	Document Findings	1 day	Thu 5/31/18	Thu 5/31/18	Jason M.[40%]
38 5		Forecast the Regional Authority Case	16 days	Thu 5/31/18	Thu 6/21/18	
39 5.	.1	Revise Group 1 Forecasts	10 days	Thu 5/31/18	Wed 6/13/18	Analyst
10 5.	.1.1	Replace Production Cost with Authority Rate/Unit	2 days	Thu 5/31/18	Fri 6/1/18	Analyse
41 5.	.1.2	Remove Other Production Costs as Appropriate (Leave for Delayed Inclusion)	2 days	Mon 6/4/18	Tue 6/5/18	
12 5.	.1.3	Determine Remaining Debt Svc. Re: Subscribed Contribution	2 days	Wed 6/6/18	Thu 6/7/18	
13 5.	.1.4	Amortized Proceeds from Sale of Reserves - if Applicable	2 days	Fri 6/8/18	Mon 6/11/18	
14 5.	.1.5	Import Avg. Distribution Cost/Unit from Previous Tasks	2 days	Tue 6/12/18	Wed 6/13/18	
15 5 .	.2	Revise Group 2 Forecasts	10 days	Thu 5/31/18	Wed 6/13/18	Analys
16 5.	.2.1	Replace Production Cost with Authority Rate/Unit	2 days	Thu 5/31/18	Fri 6/1/18	T Analysi
17 5.	.2.2	Remove Other Production Costs as Appropriate (Leave for Delayed Inclusion)	2 days	Mon 6/4/18	Tue 6/5/18	
18 5		Determine Remaining Debt Svc. Re: Subscribed Contribution	2 days	Wed 6/6/18	Thu 6/7/18	
19 5.		Amortized Proceeds from Sale of Reserves - if Applicable	2 days	Fri 6/8/18	Mon 6/11/18	
50 5.		Import Avg. Distribution Cost/Unit from Previous Tasks	2 days	Tue 6/12/18	Wed 6/13/18	
51 5.		Determine Avg. Cost per Unit for All Members	1 day	Thu 6/14/18	Thu 6/14/18	David
2 5.	.4	Document Findings from Regional Scenario	5 days	Fri 6/15/18	Thu 6/21/18	
3 6		Additional Support Services		Tue 1/23/18	Wed 8/1/18	
4 6.		Complete MOU and 28F Drafts	70 days	Mon 4/23/18	Tue 7/31/18	
5 6.		MOU	70 days	Mon 4/23/18	Tue 7/31/18	
7 6.:		Meetings to Support Regional Agreement		Tue 1/23/18	Wed 8/1/18	
8 6		January CIRDWC Meeting		Tue 1/23/18	Wed 1/24/18	
9 6.		MOU Review Meeting	2 days	Wed 2/7/18	Thu 2/8/18	
0 6.		Monthly Update		Tue 4/24/18	Wed 4/25/18	Meeting2-PerD[1 Diem], Andy B.[80%], Jason M.[50%]
1 6.2		Monthly Update		Tue 5/29/18	Wed 5/30/18	Meeting2-PerD[1 Diem]
2 6.2		Monthly Update		Tue 6/26/18	Wed 6/27/18	
3 6.2	2.6	Monthly Update	2 days	Tue 7/31/18	Wed 8/1/18	

WBS	Task Name	Duration	Start	Finish	SC24 70	7/9 7/15	August 7/22 7/29	8/5 8/12 8/19	September 8/26 9/2 5
0	Phase 2 Regionalization Project	134 days?	Tue 1/23/18	Wed 8/1/18	6/24	70 1 715 1	1/22 1/25	9/3 0/12 0/12	1 940 1 40
1	Information Acquisition	20 days	Mon 4/2/18	Fri 4/27/18					
1.1	Prepare Information Requests	2 days	Mon 4/2/18	Tue 4/3/18					
1.2	Receive and Warehouse Responses from Communities	5 days	Mon 4/16/18	Fri 4/20/18					
1.3	Followup Questions and Clarifications	5 days	Mon 4/23/18	Fri 4/27/18					
2	Consolidating Key Assumptions	10 days	Mon 4/30/18	Fri 5/11/18					
2.1	Consolidate Demand Forecast & Growth from LRP	1 day	Mon 4/30/18	Mon 4/30/18					
2.2	Quantify & Categorize LRP Investments & Reserve Capacity Price	2 days	Tue 5/1/18	Wed 5/2/18					
2.3	Quantify Local Capacity Additions, Timing, and Costs	6 days	Mon 4/30/18	Mon 5/7/18					
2.3.1	Existing Producers' Investments	2 days	Mon 4/30/18	Tue 5/1/18	1				
2.3.2	Potential Producers' Investments	3 days	Wed 5/2/18	Fri 5/4/18	1				
2.3.3	Reconcile Conflicts between LRP and Local Plans	1 day	Mon 5/7/18	Mon 5/7/18					
2 2.4	Develop Rules for Operating Expense per Unit of Investment	1 day	Tue 5/8/18	Tue 5/8/18					
3 2.5	Determine Simplified Cost Allocation Rules for Forecasting Production Costs (Producers)	1 day	Wed 5/9/18	Wed 5/9/18					
4 2.6	Consolidated Data Tables for Demand, Investment, Growth by Entity	1 day	Thu 5/10/18	Thu 5/10/18					
5 2.7	Circulate and Review of Assumptions	1 day	Fri 5/11/18	Fri 5/11/18					
3	Forecasting Status Quo Case	15 days	Fri 5/11/18	Fri 6/1/18	.0%]				
7 3.1	Group 1 Forecasts / DMWW / TS / Johnston / Grimes	10 days	Fri 5/11/18	Thu 5/24/18					
3 3.2	Group 2 Forecasts / Purch. Cap. / New Entities	10 days	Fri 5/11/18	Thu 5/24/18					
3.3	Project Team Review Group 1 and 2 Forecast	1 day	Fri 5/25/18	Fri 5/25/18					
3.4	Iteration and Revision of Group Forecasts	2 days	Tue 5/29/18	Wed 5/30/18	%],David G.[60%],Melanie H.[60%]			
1 3.5	Determine Avg. Cost per Unit for All Members	1 day	Thu 5/31/18	Thu 5/31/18	60%]				
2 3.6	Document Findings	1 day	Fri 6/1/18	Fri 6/1/18	1		į		
3 4	Authority Cost Sharing Framework	14 days?	Fri 5/11/18	Thu 5/31/18	1 %]				
4.1	Determine Capital Cost Sharing Approach	9 days?	Fri 5/11/18	Wed 5/23/18					
5 4.1.1	Combine Asset Contributions at Book Values	1 day	Fri 5/11/18	Fri 5/11/18					
6 4.1.2	Combine Authority Asset Investments from LRP	1 day	Mon 5/14/18	Mon 5/14/18	1		1		
7 4.1.3	Add Reserve Capacity Purchases and Timeline	1 day	Mon 5/14/18	Mon 5/14/18					
8 4.1.4	Construct Book Value Forecast of All Authority Assets	2 days	Tue 5/15/18	Wed 5/16/18					
9 4.1.5	Determine Member Contributions and Amortization Schedule	1 day	Thu 5/17/18	Thu 5/17/18					
0 4.1.6	Evaluate and Recommend Growth/Expansion Cost Recovery Mechansims	3 days	Fri 5/18/18	Tue 5/22/18					
1 4.1.7	Evaluate and Recommend Strategy for Disposition of Current Debts	1 day?	Wed 5/23/18	Wed 5/23/18					
2 4.2	Determine O&M Cost Sharing Approach	3 days	Thu 5/24/18	Tue 5/29/18					
3 4.2.1	Import O&M for DMWW Facilities	1 day	Thu 5/24/18	Thu 5/24/18					
4 4.2.2	Import O&M for Other Facilities	1 day	Fri 5/25/18	Fri 5/25/18	<u> </u>				
	Task Project Summary		Manual Task		Start-only	С	Deadline	+	
niect: Phas	e 2 Regionalization Split Inactive Task		Duration-only		Finish-only	3	Progress	4×	
ate: Mon 3/			Manual Summary	Rollup	External Tanks	NAME OF TAXABLE PARTY.	Manual Progress		
	Milestone Practice Milestone		Manual Summary	None -	External Milestone	0			
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	WBS	Task Name		Duration	Start	Finish	6/24 7/1 7/8 7/15 7/22 :	August September 7/29 8/5 8/12 8/19 8/26 9/2 9/9			
5	4.2.3	Estimate	and Forecast Authority Org. O&M Costs	1 day	Tue 5/29/18	Tue 5/29/18	12 170 1715	1140 110 110 110 110			
6	4.3	Determine a	Avg. Cost per Unit / Wholesale Purchase Cost - All mem	bers 1 day	Wed 5/30/18	Wed 5/30/18	1				
7	4.4	Document I	Findings	1 day	Thu 5/31/18	Thu 5/31/18					
	5	Forecast the R	legional Authority Case	16 days	Thu 5/31/18	Thu 6/21/18	Andy B.[20%],Jason M.[10%]				
)	5.1	Revise Grou	up 1 Forecasts	10 days	Thu 5/31/18	Wed 6/13/18	80%],Melanie H.[60%]				
) !	5.1.1	Replace F	Production Cost with Authority Rate/Unit	2 days	Thu 5/31/18	Fri 6/1/18					
	5.1.2	Remove (Other Production Costs as Appropriate (Leave for Delay)	ed 2 days	Mon 6/4/18	Tue 6/5/18					
2	5.1.3	Determin	e Remaining Debt Svc. Re: Subscribed Contribution	2 days	Wed 6/6/18	Thu 6/7/18					
3	5.1.4	Amortize	d Proceeds from Sale of Reserves - if Applicable	2 days	Fri 6/8/18	Mon 6/11/18					
1	5.1.5	Import A	vg. Distribution Cost/Unit from Previous Tasks	2 days	Tue 6/12/18	Wed 6/13/18					
5	5.2	Revise Grou	up 2 Forecasts	10 days	Thu 5/31/18	Wed 6/13/18	80%],David G.[60%]				
6	5.2.1	Replace F	Production Cost with Authority Rate/Unit	2 days	Thu 5/31/18	Fri 6/1/18					
7	5.2.2	Remove (Other Production Costs as Appropriate (Leave for Delay	ed 2 days	Mon 6/4/18	Tue 6/5/18					
8	5.2.3	Determin	e Remaining Debt Svc. Re: Subscribed Contribution	2 days	Wed 6/6/18	Thu 6/7/18					
9	5.2.4	Amortize	d Proceeds from Sale of Reserves - if Applicable	2 days	Fri 6/8/18	Mon 6/11/18					
0	5.2.5	Import A	vg. Distribution Cost/Unit from Previous Tasks	2 days	Tue 6/12/18	Wed 6/13/18					
1	5.3 Determine		etermine Avg. Cost per Unit for All Members		Determine Avg. Cost per Unit for All Members 1 day	Determine Avg. Cost per Unit for All Members 1 day		Thu 6/14/18	Thu 6/14/18	50%],Melanie H.[60%]	
2	5.4	Document I	ument Findings from Regional Scenario 5 day		5 days Fri 6/15/18		ason M.[40%]				
3	6	Additional Su	pport Services	134 days	Tue 1/23/18	Wed 8/1/18		-			
1	6.1	Complete N	1OU and 28F Drafts	70 days	Mon 4/23/18	Tue 7/31/18		Jason M.[5%],David G.[5%]			
5	6.1.1	MOU		70 days	Mon 4/23/18	Tue 7/31/18		1			
7	6.2	Meetings to	Support Regional Agreement	134 days	Tue 1/23/18	Wed 8/1/18		┩			
3	6.2.1	January 0	CIRDWC Meeting	2 days	Tue 1/23/18	Wed 1/24/18					
9	6.2.2	MOU Rev	riew Meeting	2 days	Wed 2/7/18	Thu 2/8/18					
0	6.2.3	Monthly	Update	2 days	Tue 4/24/18	Wed 4/25/18					
1	6.2.4	Monthly	Update	2 days	Tue 5/29/18	Wed 5/30/18	dy B.[80%],Jason M.[50%]				
2	6.2.5	Monthly	Update	2 days	Tue 6/26/18	Wed 6/27/18	Meeting2-PerD[1 Diem],Andy B.[80%]				
3	6.2.6	Monthly	Update	2 days	Tue 7/31/18	Wed 8/1/18		Meeting2-PerD[1 Diem], Andy B.[80%], Jason M.[
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