In the Matter Of:

In Re: RMP - STEP Act

HEARING, DOCKET NO. 16-035-36

June 17, 2019

Job Number: 537232

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        BEFORE THE PUBLIC SERVICE COMMISSION OF UTAH
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     In the Matter of the
 3
     Application of Rocky ) Docket No. 16-035-36
 4
     Mountain Power to )
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     Implement Programs ) Hearing
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 7
     Authorized by the
                               )
     Sustainable Transportation)
9
     and Energy Plan Act
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                               )
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                         June 17, 2019
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                           10:00 a.m.
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              Location: Heber M. Wells Building
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                 160 East 300 South, Room 403
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                     Salt Lake City, Utah
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                 Reporter: Melinda J. Andersen
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24
        Certified Shorthand Reporter and Notary Public
                       Job No. 537232
25
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24		-000-
25		

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1	Page 4 PROCEEDINGS
2	HEARING OFFICER: Good morning, everyone. This
3	is the time and place noticed for the hearing in the Matter
4	of the Application of Rocky Mountain Power to Implement
5	Programs Authorized by the Sustainable Transportation and
6	Energy Plan Act. It's Commission Docket No. 16-035-36.
7	My name is Michael Hammer. I am the
8	Commission's designated presiding officer. Let's go ahead
9	and take appearances beginning with the Applicant please.
10	MR. SOLANDER: Good morning. I'm Daniel
11	Solander here on behalf of Rocky Mountain Power.
12	MS. SCHMID: Patricia E. Schmid with the Utah
13	Attorney General's Office on behalf of the Division of
14	Public Utilities. And with me is Robert Davis as the
15	Division's witness.
16	MR. MOORE: Robert Moore of the Attorney
17	General's Office representing the Office of Consumer
18	Services. With me is Alex Ware of the Office.
19	MS. HAYES: Good morning. Sophie Hayes on
20	behalf of Western Resource Advocates. And with me
21	telephonically is our witness Ken Wilson. And thank you to
22	the Commission for allowing him to appear by phone today.
23	MR. HOLMAN: Good morning, I'm Hunter Holman
24	(Off the record.)
25	HEARING OFFICER: Let's go back on the record

Page 5 1 please. I believe we were with Mr. Holman making his 2 appearance. Go ahead. 3 MR. HOLMAN: Again, my name is Hunter Holman. 4 I'm with Utah Clean Energy. With me today is Kate Bowman, 5 also with Utah Clean Energy. HEARING OFFICER: And there being no other 6 parties in the room, is there anything before we ask the 7 Applicant to call its first witness? Would the parties 8 9 prefer the witnesses take the stand today or testify from 10 their place next to counsel? Is there a preference? 11 MR. SOLANDER: Mine aren't next to me. 12 HEARING OFFICER: Are they here? 13 MR. SOLANDER: Yes, they're right behind me. HEARING OFFICER: Well, they can either come 14 15 sit next to you or come up to the stand. I don't know whether to anticipate that there will be a lot of cross 16 examination. Do the parties have a preference? I'm fine 17 with the parties staying seated next to counsel. 18 19 MS. SCHMID: I would be fine with the parties 2.0 sitting next to counsel as well. 21 MS. HAYES: No objection. 2.2 HEARING OFFICER: Then we'll proceed that way. 23 Mr. Solander? 24 Yes. Thank you. Rocky Mountain MR. SOLANDER: 25 Power will be presenting three witnesses today: James

Page 6 Campbell in support of the Intermodal Hub Project; William 1 2 Comeau in support of the Battery Demand Response Project; 3 and Rohit Nair in support of the ARMS project. And 4 Mr. Campbell will be our first witness. HEARING OFFICER: Mr. Campbell, do you swear to 5 6 tell the truth? THE WITNESS: I do. 7 8 HEARING OFFICER: Thank you. 9 JAMES CAMPBELL, was called as a witness, and having been first duly 10 11 sworn to tell the truth, testified as follows: 12 DIRECT EXAMINATION 13 BY MR. SOLANDER: 14 Q. Would you please state and spell your name for the record? 15 16 Yes. My name is James Campbell, J-A-M-E-S, Α. 17 C-A-M-P-B-E-I-IBy whom are you employed and in what capacity? 18 Q. 19 I'm employed at Rocky Mountain Power where I am 20 the policy and project adviser. 21 As a policy adviser did you prepare testimony 0. 22 in this docket for the Intermodal Hub Project? 23 Α. Yes, I did. Do you have any additions or corrections that 24 0. you would like to make to the testimony at this time? 25

1	Page 7 A. No, I don't.
2	MR. SOLANDER: I would ask that at this time
3	Mr. Campbell's testimony be moved into the record.
4	HEARING OFFICER: It's admitted.
5	Q. (By Mr. Solander) And, Mr. Campbell, have you
6	prepared a summary of your testimony that you would like to
7	share with the Commission today?
8	A. Yes, I have. The Company requests
9	authorization to spend approximately \$2 million on the
10	Intermodal Hub Project to develop a power balance and
11	control system for multi modal vehicle charging at sites
12	with high peak power demand.
13	The primary goals are to reduce peak loads and
14	increase utilization of electrical equipment, which should
15	minimize both infrastructure upgrades and operating costs.
16	This project is the unique collaboration of the
17	Company, Utah State University's Sustainable Electrified
18	Transportation Center, or SELECT, and the Utah Transit
19	Authority, which will demonstrate the ability to manage the
20	challenges of meeting and coordinating expanding high
21	wattage electric transportation power demands.
22	The proposed system will be developed and
23	evaluated at the Utah State University's Electric Vehicle
24	Roadway Research Facility and Test Track, and will be
25	deployed and validated at the UTA Salt Lake City Intermodal

1	Hub located on 200 South and 600 West in Salt Lake City.
2	The UTA site will serve as a living laboratory
3	for data collection and a model showcase of sustainable
4	electrified transportation technology. The lessons learned
5	should reduce the cost for both customers and the system as
6	EV adoption becomes more widespread.
7	Thus, the project's objectives are to develop
8	best practices for new technology function and deployment
9	and to evaluate the merit of the technology's application.
10	Q. Would you also today like to respond to the
11	comments filed by the parties regarding the Intermodal Hub
12	Project?
13	A. Yes, I would. So in summary, the Division of
14	Public Utilities recommended approval with a recommendation
15	for quarterly updates. The Office recommended approval
16	with conditions that RMP report on risk communication
17	issues not resolved on the appropriate timeframe and
18	perform a cost benefit analysis at the end of the pilot
19	project.
20	WRA recommended approval with annual reporting
21	requirements, including information about how the planning
22	and operating tools will be used to demonstrate the cost
23	effectiveness of replicating the project at other sites,
24	information about plans for applying project results to
25	other sites including cost effectiveness evaluations,

Page 9 information on whether and how the project is informing 1 2 plans for electric vehicle charging infrastructure and 3 distribution planning, and then reports about the hardware, 4 software, and power control technologies the Company is employing to control and schedule vehicle charging, and 5 documentation of the benefits gained from this project. 6 7 Lastly, Utah Clean Energy recommended approval with the condition that RMP host stakeholder workshops 8 9 following the conclusion of each of the four tasks identified in the Company's application. 10 11 The Company agrees with the recommendations 12 from the Division. The Company also agrees with the 13 recommendation from the Office. In terms of WRA, the Company believes that the 14 15 annual STEP report that the Company files will provide much of the information requested by WRA, but we do suggest as 16 an alternative that the annual report will include progress 17 on achieving the project's four goals outlined in the 18 original application that was included in supporting 19 20 testimony by myself. 21 The Company also commits to providing at the 22 conclusion of the project the final report, including the detailed cost benefit analyst together with an assessment 23 24 of the potential for future deployment of the technology at other sites. 25

1		And then lastly, in terms of Utah Clean Page 10
2	Energy's re	commendation, the Company does believe that the
3	stakeholder	workshops in essence would be covered through
4	the quarter	ly updates and would agree to make those open to
5	stakeholder	s to participate with the quarterly updates.
6		And then in terms of the specific following
7	the conclus	ion of each of the four tasks, the Company did
8	not agree t	o the timing with those completion of specific
9	tasks.	
10	Q.	Mr. Campbell, in your opinion is the Intermodal
11	Hub Project	consistent with the goals of the STEP
12	legislation	and in the interest of the Company's customers?
13	Α.	I do. The Company does believe this project is
14	in the inte	rest of the Company's customers. And we
15	respectfull	y request that the Commission approve
16	approximate	ly \$2 million of STEP funding for the Intermodal
17	Hub Project	
18	Q.	Does that conclude your testimony?
19	Α.	Yes, it does.
20	Q.	Thank you.
21		MR. SOLANDER: Mr. Campbell is available for
22	cross exami	nation.
23		HEARING OFFICER: Ms. Schmid?
24		MS. SCHMID: No questions.
25		HEARING OFFICER: Mr. Moore?

	Page 11
1	MR. MOORE: No questions. Thank you.
2	HEARING OFFICER: Ms. Hayes?
3	MS. HAYES: I have no questions. Thank you.
4	HEARING OFFICER: Mr. Holman?
5	MR. HOLMAN: No questions. Thank you.
6	HEARING OFFICER: All right. And I have none.
7	Mr. Solander, please call your next witness.
8	MR. SOLANDER: All right. I would ask that
9	Mr. Campbell be excused.
10	HEARING OFFICER: He is.
11	MR. SOLANDER: William Comeau will be the
12	Company's next witness.
13	HEARING OFFICER: Mr. Comeau, do you swear to
14	tell the truth?
15	THE WITNESS: I do.
16	WILLIAM COMEAU,
17	was called as a witness, and having been first duly
18	sworn to tell the truth, testified as follows:
19	DIRECT EXAMINATION
20	BY MR. SOLANDER:
21	Q. Would you please state and spell your name for
22	the record?
23	A. Absolutely. Good morning, everyone. William
24	Comeau, W-I-L-L-I-A-M, C-O-M-E-A-U.
25	Q. And by whom are you employed and in what

Page 12 1 capacity? 2 Α. Rocky Mountain Power. I am the director of 3 customer innovations. 4 0. As director of customer innovations did you 5 file testimony in this docket in support of the Battery Demand Response Project? 6 7 Α. Yes. Do you have any corrections or additions to 8 0. 9 that testimony that you would like to make today? 10 Α. No. MR. SOLANDER: At this time I would move that 11 12 Mr. Comeau's testimony be entered into the record. 13 HEARING OFFICER: It's admitted. 14 0. (By Mr. Solander) Thank you. Have you 15 prepared a summary of that testimony that you would like to share with the Commission today? 16 17 Α. I have. 18 Q. Please proceed. On March 8, 2019 the Company filed an 19 20 application seeking authorization from the Commission to 21 implement three projects, one of which was for a Battery 22 Demand Response Project. 23 The proposed Battery Demand Response Project is a collaboration between the Company and Wasatch Development 24 25 for the installation of batteries at a 600 unit

Page 13 multi-family complex in Herriman. 1 2 The batteries would be charged by solar and the 3 Company would have control of the batteries to deploy them 4 for demand response and other system needs. In addition to demand response, the project 5 would also allow the Company to inform the value of having 6 7 behind-the-meter grid optimized solar and battery storage connected to the Company's distribution system. 8 9 The Company is requesting authorization to spend approximately \$3.27 million of STEP funds as an 10 11 innovating technology. By partnering with Wasatch for this 12 project the Company will be able to test the feasibility 13 and economic benefit of battery demand response and study behind-the-meter battery behavior for a fraction of what it 14 15 would normally cost. 16 In comments parties were supportive of this 17 project with the following recommendations, which the Company agrees to as recommend: Quarterly updates on the 18 project; proof of Herriman City's approval; assurance that 19 20 the Company and its customers are protected from any 21 resulting legal actions from the batteries; assurance that 22 the Company will not use the data gathered from the project 23 in insolation to develop rate design. 24 The following additional recommendations were 25 made by parties which the Company addressed in its reply

1	Page 14 comments. Report annually on the aggregate total of
2	ongoing OAG for all STEP projects through remaining lives
3	of the project. The Company proposes this topic be
4	discussed at the STEP exit strategy meeting later this
5	year.
6	WRA's request that the Company provide twice
7	yearly updates. In response to WRA, the Company proposes
8	to provide performance updates midyear annually as part of
9	the quarterly updates followed by a more comprehensive
10	report to be submitted with this STEP annual report.
11	The Company believes this project is consistent
12	with the STEP act and in the interest of Rocky Mountain
13	Power customers and respectfully requests that the
14	Commission approve this project as proposed.
15	Q. Does that conclude your testimony today?
16	A. It does.
17	Q. Thank you.
18	MR. SOLANDER: Mr. Comeau is available for
19	cross examination.
20	HEARING OFFICER: Ms. Schmid?
21	MS. SCHMID: No questions.
22	HEARING OFFICER: Mr. Moore?
23	MR. MOORE: No questions. Thank you.
24	HEARING OFFICER: Ms. Hayes?
25	MS. HAYES: No questions. Thank you.
I	

	Page 15
1	HEARING OFFICER: Mr. Holman?
2	MR. HOLMAN: No questions. Thank you.
3	HEARING OFFICER: Thank you. And I have none.
4	Mr. Comeau, you are excused. And your final witness,
5	Mr. Solander?
6	MR. SOLANDER: Yes. It will be Rohit Nair in
7	support of the ARMS Project.
8	THE WITNESS: Good morning, everyone.
9	THE COURT: Mr. Nair, do you swear to tell the
10	truth, sir?
11	THE WITNESS: Yes, I do.
12	HEARING OFFICER: Thank you.
13	ROHIT NAIR,
14	was called as a witness, and having been first duly
15	sworn to tell the truth, testified as follows:
16	DIRECT EXAMINATION
17	BY MR. SOLANDER:
18	Q. Would you please state and spell your name for
19	the record?
20	A. My name is Rohit P. Nair, R-O-H-I-T, P,
21	N-A-I-R.
22	Q. And by whom are you employed and in what
23	capacity?
24	A. I'm employed by Rocky Mountain Power for over
25	seven years as Grid Solutions Manager in the Transmission &

1	Page 16 Distribution Operations Group, supporting both of the
2	Company's Rocky Mountain Power and Pacific Power Divisions.
3	In my role I'm the technical support lead for all projects
4	approved under the STEP Utah Innovative Technologies
5	Program.
6	Q. Mr. Nair, have you ever testified in front of
7	the Public Service Commission before?
8	A. Yes. This is my second testimony supporting
9	projects supported under the STEP Utah Innovative
10	Technologies Program.
11	Q. Would you please briefly introduce the topic
12	you are going to be testifying about today?
13	A. I will be discussing the Company's request
14	seeking funding of \$16.52 million for the Advanced
15	Resiliency Management System, also known as the ARMS
16	Project, under the STEP Utah Innovative Technologies
17	Program.
18	Q. Did you file testimony in support of that
19	program?
20	A. Yes.
21	Q. Do you have any additions or corrections you
22	would like to make to that testimony?
23	A. No.
24	MR. SOLANDER: I move that Mr. Nair's testimony
25	be admitted into the record.

1	Page 17 HEARING OFFICER: It's admitted.
2	Q. (By Mr. Solander) And have you prepared a
3	summary of your testimony that you would like to share with
4	the Commission?
5	A. Yes.
6	Q. Please proceed.
7	A. On March 8, 2019 the Company file an
8	application requesting STEP funding to develop and deploy
9	an Advanced Resiliency Management System that includes, but
10	is not limited to, the ability to receive outage
11	notifications from existing ERT electric meters, installing
12	line sensors and communicating fault circuit indicators on
13	distribution circuits connecting critical customers to
14	enable realtime information in exchange with the Company's
15	control center.
16	Based on a detailed analysis, the Company will
17	identify optimal locations for installing the ERT Gateway
18	systems that will enable the Company to collect information
19	from all existing residential AMR meter installations.
20	The Company will also evaluate available
21	information on outage data, number of critical customers on
22	the circuit, distribution circuit conflict configurations
23	as in radial or looped, type of distribution equipment
24	installed, and other similar information to determine the
25	distribution circuits requiring installation of advanced

1	Page 18
1	line sensors and other hardware to improve outage
2	management.
3	The Company consistently implements reliability
4	and power quality enhancements on its transmission and
5	distribution systems to improve safety, reliability and
6	customer service. The ARMS project enables the Company to
7	explore, develop, and enhance new outage management
8	capabilities to restore power faster to critical customers
9	such as hospitals, trauma centers, police and fire dispatch
10	centers, as well as all other customers in the State of
11	Utah.
12	Deploying innovative technologies to improve
13	system reliability will further provide the Company an
14	understanding of the opportunities and challenges of
15	utilizing emerging technology on the distribution system.
16	In addition to improving reliability and
17	enhancing outage management capabilities, customers will be
18	able to access automated, timely, and accurate bills,
19	regardless of weather conditions or property access
20	limitations, which traditionally hamper collection of meter
21	information. This project will further provide customers
22	the ability to access interval usage data.
23	This project also creates a significant
24	opportunity for the Company to enable technologies that can
25	be leveraged for future grid modernization applications,

1	Page 19 including distribution automation, outage management, data
2	analytics, and demand-response programs.
3	The Division, the Office, and WRA recommended
4	approval of the Company's proposal with some reporting
5	conditions that are addressed in the Company's reply
6	comments. Utah Clean Energy supports the project, but
7	recommends it be funded through base rate instead of STEP.
8	For reasons that are provided in the replied comments the
9	Company believes that the ARMS Project is more
10	appropriately funded through STEP than base rates.
11	The Company respectfully requests the
12	Commission to approve the Company's request to utilize STEP
13	funding in the amount of \$16.52 million to implement the
14	Advanced Resiliency Management System Project that will
15	ensure better service quality to our customers and allow
16	the company to continue to build a more progressive grid
17	which is in the best interest of all our customers.
18	Thank you for your time allowing me to discuss
19	my testimony today.
20	Q. Does that conclude your testimony?
21	A. Yes, it does.
22	MR. SOLANDER: Mr. Nair is available for cross
23	examination.
24	HEARING OFFICER: Ms. Schmid?
25	MS. SCHMID: No questions. Thank you.

	Page 20
1	HEARING OFFICER: Mr. Moore?
2	MR. MOORE: No cross. Thank you.
3	HEARING OFFICER: Ms. Hayes?
4	MS. HAYES: I have no questions. Thank you.
5	HEARING OFFICER: Mr. Holman?
6	MR. HOLMAN: No questions. Thank you.
7	HEARING OFFICER: All right. Thank you. You
8	are excused, Mr. Nair. Mr. Solander, no other witnesses?
9	MR. SOLANDER: That concludes the Company's
10	presentation. Thank you.
11	HEARING OFFICER: Great. Ms. Schmid?
12	MS. SCHMID: Thank you. The Division would
13	like to call Mr. Robert Davis as its witness. May he
14	please be sworn?
15	HEARING OFFICER: Mr. Davis, do you swear to
16	tell the truth?
17	THE WITNESS: I do.
18	ROBERT DAVIS,
19	was called as a witness, and having been first duly
20	sworn to tell the truth, testified as follows:
21	DIRECT EXAMINATION
22	BY MS. SCHMID:
23	Q. Please state your full name, title, employer,
24	and business address for the record.
25	A. Robert A. Davis. I work for the Division of
1	

1	Public Util	Page 21 ities where I am a Utility Technical Consultant.
2	Q.	And the address? 160 East 300 South, perhaps,
3	Salt Lake C	ity?
4	A.	Yes. Thank you.
5	Q.	Have you participated in this docket in
6	conjunction	with your employment at the Division?
7	A.	Yes, I have.
8	Q.	Did you prepare or cause to be prepared and
9	filed the D	Division's memorandum dated May 14, 2019?
10	A.	Yes.
11	Q.	Do you have any changes or corrections to that
12	memorandum?	
13	A.	I don't.
14	Q.	Do you adopt these comments as your testimony
15	today?	
16	Α.	I do.
17		MS. SCHMID: The Division would like to move
18	for the adm	mission of its comments dated May 14, 2019.
19		HEARING OFFICER: They are admitted.
20		MS. SCHMID: Thank you.
21	Q.	(By Ms. Schmid) Mr. Davis, have you prepared a
22	summary tod	lay?
23	A.	Yes, I have.
24	Q.	Please proceed.
25	A.	In Phase Five of the STEP proceeding, Rocky

1	Page 22 Mountain Power requests the Commission's approval of its
2	application to implement the Intermodal Hub Project, the
3	Battery Demand Response Project, and the Advanced
4	Resiliency Management System Project.
5	The Intermodal Hub Project is a significant
6	research and design project in collaboration with Utah
7	State University and the Utah Transit Authority to develop
8	and deploy algorithms along with hardware to utilize
9	existing Utah Transit Authority infrastructure more
10	efficiently. The project provides charging infrastructure
11	for various types of electric vehicles at Utah Transit
12	Authority's Salt Lake Central Station. Rocky Mountain
13	Power is requesting approximately \$2 million of STEP funds
14	for this project.
15	The Battery Demand Response Project provides an
16	opportunity to study how a complex, behind-the-meter
17	multi-family community, solar and storage system, might
18	interact with the distribution grid under different
19	scenarios. Rocky Mountain Power is requesting
20	approximately \$3.2 million of STEP funds for this project.
21	The Advanced Resiliency Management System
22	Project has two parts: (1) a proposal to modify current
23	Automated Meter Reading meters to provide data similar to
24	Advanced Metering Infrastructure meters through software
25	upgrades; and (2) deploy a communication mesh network and

1	Page 23 line sensors. The proposed cost to develop and deploy the
2	Automated Meter Reading system is approximately \$11.3
3	million. The cost to develop and deploy the communication
4	based fault circuit indicator and encoder receiver
5	transmitter gateway network is approximately \$5.2 million.
6	The proposed combined budget for the Advanced Resiliency
7	Management System Project is approximately \$16.5 million.
8	While the Division recognizes that Rocky
9	Mountain Power has an obligation to serve its customers,
10	which includes researching innovative ways to serve its
11	customers as demands and technologies change, certain
12	aspects of the proposed projects, if presented as
13	stand-alone projects outside of the STEP programs, may not
14	be in the public interest. Specifically, the use of
15	ratepayer funds to the primary benefit of a single customer
16	or entity without the offsetting knowledge and experience
17	that will enhance Rocky Mountain Power's ability to meet
18	changing customer demands and benefit all ratepayers in the
19	future, would likely not be in the public interest.
20	Weighing the potential benefits for all customers as an
21	outcome of Rocky Mountain Power's proposed projects versus
22	the benefits to the single customer or entity, the Division
23	concludes that the proposals marginally meet the public
24	interest standard.
25	The Division recommends the Commission direct

1	Page 24 RMP to meet with interested parties quarterly throughout
2	the remainder of the STEP program to update those
3	interested on the progress of the projects. The Division
4	also recommends the Commission direct Rocky Mountain Power
5	to meet with the Division and other interested parties
6	during the fourth quarter of this year to discuss the exit
7	strategy for the STEP program.
8	The Division concludes the projects are useful
9	to inform Rocky Mountain Power personnel and other
10	stakeholders with valuable information that will help
11	manage system impacts as a result of electric vehicle
12	charging infrastructure, self-sustained multi-family
13	communities, and address reliability issues from
14	distributed generation and outages.
15	The Division recommends the Commission approve
16	Rocky Mountain Power's request to implement the Intermodal
17	Hub, Battery Demand Response, and Advanced Resiliency
18	Management System projects for roughly \$21.7 million of
19	Step funds. Thank you.
20	MS. SCHMID: Mr. Davis is now available for
21	cross examination and questions from the Hearing Officer.
22	HEARING OFFICER: Mr. Solander?
23	MR. SOLANDER: No questions. Thank you.
24	HEARING OFFICER: Mr. Moore?
25	MR. MOORE: No questions. Thank you.
1	

	Page 25
1	HEARING OFFICER: Ms. Hayes?
2	MS. HAYES: I'll add I have no questions.
3	HEARING OFFICER: Mr. Holman?
4	MR. HOLMAN: I also have no questions. Thank
5	you.
6	HEARING OFFICER: Thank you. Ms. Schmid, any
7	other witnesses?
8	MS. SCHMID: No. That concludes the Division's
9	presentation.
10	HEARING OFFICER: Thank you. Mr. Moore?
11	MR. MOORE: The Office calls Alex Ware and asks
12	that he be sworn.
13	HEARING OFFICER: Mr. Ware, do you swear to
14	tell the truth?
15	THE WITNESS: I do.
16	ALEX WARE,
17	was called as a witness, and having been first duly
18	sworn to tell the truth, testified as follows:
19	DIRECT EXAMINATION
20	BY MR. MOORE:
21	Q. Would you please state your name and where you
22	are employed?
23	A. My name is Alex Ware. I am employed as a
24	Utility Analyst with the Office of Consumer Services.
25	Q. In your capacity as a Utility Analyst, have you

1	worked on the issues presented in Docket 16-035-36?
2	A. Yes.
3	Q. Did you participate in the drafting and filing
4	of the Office's May 14, 2019 comments in this docket?
5	A. Yes, I did.
6	Q. Do you have any changes you would like to make
7	to the May 14th comments?
8	A. No, I don't.
9	Q. Do you adopt these comments as your testimony
10	today?
11	A. I do.
12	MR. MOORE: The Office asks for admission of
13	these comments as Mr. Ware's testimony.
14	HEARING OFFICER: They're admitted.
15	Q. (By Mr. Moore) Have you prepared a statement
16	concerning the issues presented in the May 14th comments?
17	A. Yes, I did.
18	Q. Please proceed.
19	A. Thank you. As stated in our comments on this
20	case from May 14, 2019, the Office recommends the
21	Commission approve the Intermodal Hub Project, the Battery
22	Demand Response Project, and the ARMS Project.
23	We recommend approval of the Intermodal Hub
24	Project subject to the following conditions: That the
25	Commission require the Company to conduct a full cost

1	benefit analysis at the completion of the project; and that
2	the Commission also require the Company to report to the
3	Commission and other stakeholders any risks or delays in
4	the project that are not resolved within an appropriate
5	timeframe.
6	The Office believes that with the expected
7	increase in electric vehicles of all types, finding ways to
8	decrease the expense of upgrades to substations and
9	distribution centers, and to better utilize the
10	infrastructure by optimizing charging should be beneficial
11	to all customers.
12	We also recommend that the Battery Demand
13	Response Project be approved subject to the following
14	conditions: The Commission require the Company to report
15	annually, and at the time of a new STEP project is
16	proposed, the aggregate total of ongoing operations,
17	maintenance, administrative and general costs for all
18	existing in proposed STEP projects by year for the
19	remaining lives of the projects.
20	The Office believes this project meets the
21	requirements of the STEP legislation. And the Office
22	agrees with the Company that the proposed project is a cost
23	effective way for the Company to study a large
24	behind-the-meter, solar, battery program.
25	And lastly, we recommend the approval of the

	Page 28
1	Advanced Resiliency Management System called Arms. The
2	Office sees the Arms Project as a practical improvement to
3	meter data gathering and outage detection for a more
4	minimal investment rather than replacing all AMR meters
5	with AMI meters at this time. That concludes my statement.
6	MR. MOORE: Mr. Ware is available for cross
7	examination and questions from the Hearing Officer.
8	HEARING OFFICER: Mr. Solander?
9	MR. SOLANDER: No questions.
10	HEARING OFFICER: Ms. Schmid?
11	MS. SCHMID: No questions. Thank you.
12	HEARING OFFICER: Ms. Hayes?
13	MS. HAYES: No questions. Thank you.
14	HEARING OFFICER: Mr. Holman?
15	MR. HOLMAN: No questions. Thank you.
16	HEARING OFFICER: All right. Thank you. Any
17	other witnesses, Mr. Moore?
18	MR. MOORE: No other witnesses. Thank you.
19	HEARING OFFICER: We'll turn to you, Ms. Hayes.
20	MS. HAYES: Thank you. Western Resource
21	Advocates would like to call Ken Wilson.
22	HEARING OFFICER: Who is on the telephone?
23	MS. HAYES: Who is on the telephone, I believe.
24	HEARING OFFICER: Mr. Wilson?
25	THE WITNESS: I'm here. Can you hear me?
1	

```
Page 29
 1
                 HEARING OFFICER: Yes, we can hear you.
 2
     Mr. Wilson, do you swear to tell the truth?
 3
                 THE WITNESS: I do.
 4
                 HEARING OFFICER: Thank you.
 5
                           KENNETH WILSON,
         was called as a witness, and having been first duly
 6
         sworn to tell the truth, testified as follows:
 7
 8
                          DIRECT EXAMINATION
 9
     BY MS. HAYES:
10
                 Mr. Wilson, would you please state your name,
           0.
     position, and employer for the record?
11
12
           Α.
                 Kenneth Wilson. My employer is Western
     Resource Advocates. My address is 2260 Baseline Road,
13
     Suite 200, Boulder, Colorado, 80302.
14
15
                 What is your position at Western Resource
           Q.
16
     Advocates?
17
                 I'm the energy fellow, or engineering fellow.
           Α.
                 Thank you. In that capacity did you prepare
18
           Q.
19
     comments that were filed with this Commission on May 14,
20
     2019?
21
           Α.
                 Yes, I did.
22
           Q.
                 Do you have any changes to those comments?
23
           Α.
                 I do not.
24
           0.
                 Do you adopt those comments as your testimony
     here today?
25
```

Page 30 I do. 1 Α. 2 MS. HAYES: I would request that the Commission 3 admit those comments to the record. 4 HEARING OFFICER: They're admitted. (By Ms. Hayes) Mr. Wilson, did you prepare a 5 0. summary of your comments to present today? 6 7 Yes, I did. Α. Please proceed with that. 8 Q. Thank you. Good morning. I'm Ken Wilson 9 10 representing Western Resource Advocates. I've been an 11 electrical engineer with 40 years of experience. I have 12 appeared before this Commission a number of times over the 13 past 20 years. And I appreciate being able to participate by phone today, especially because it allowed me to be home 14 15 with my family on Father's Day. 16 WRA supports the three new STEP projects that 17 Rocky Mountain Power is proposing. They are all good projects that will add to the projects already being 18 implemented under STEP legislation. 19 20 The Intermodal Hub Project is an innovative 21 idea that will allow fast charging of electric buses and 22 other vehicles utilizing grid infrastructure already in place to power light rail. Both light rail and fast 23 charging require high capacity grid facilities to carry 24 25 large loads. The Intermodal Hub Project will study using

1	Page 31 the same infrastructure for both applications.
2	I have already been promoting this project in
3	other states where similar sharing of good resources could
4	be beneficially applied.
5	The Battery Demand Response Project will allow
6	Rocky Mountain Power to gain valuable experience in
7	managing behind-the-meter battery storage in combination
8	with distributed solar generation. This experience will
9	allow the company and other interested parties to see how
10	effectively this type of storage can be utilized to reduce
11	peak flow on the grid and on the Company's bulk power
12	system. This is a relatively large project. It should get
13	interesting results.
14	The ARMS Project is a STEP in the evolution of
15	the Company's distribution grid. Grid modernization is a
16	key element in providing customers with increased
17	reliability and other grid features.
18	I have testified in other state how grid
19	modernization provides multiple benefits to customers, the
20	most valuable being measurable improvements in reliability.
21	The ARMS Project should deliver increased reliability that
22	can be measured as it is implemented.
23	WRA recommends additional reporting
24	requirements associated with these projects in order to
25	help evaluate the benefits of future distribution grid

1	Page 32 programs and investments. WRA also recommends the
2	Commission begin investigating the public interest benefits
3	of an integrated distribution system planning in order to
4	ensure that customers receive the maximum benefit from the
5	distribution side investment. Rather than repeating those
6	recommendations here, I will refer the Commission to our
7	final comments.
8	In summary, Western Resource Advocates supports
9	these new STEP projects with the additional metrics and
10	updates that we have recommended in our comments.
11	I would be happy to answer any questions you
12	may have at this time.
13	Q. Thank you, Mr. Wilson.
14	MS. HAYES: Mr. Wilson is available for
15	questions.
16	HEARING OFFICER: Mr. Solander?
17	MR. SOLANDER: No questions. Thank you.
18	HEARING OFFICER: Ms. Schmid?
19	MS. SCHMID: No questions. Thank you.
20	HEARING OFFICER: Mr. Moore?
21	MR. MOORE: No questions. Thank you.
22	MR. HOLMAN: No questions. Thank you.
23	HEARING OFFICER: All right. Any other
24	witnesses, Ms. Hayes?
25	MS. HAYES: No. Thank you.

Page 33 HEARING OFFICER: Mr. Holman? 1 2 MR. HOLMAN: Thank you. Utah Clean Energy 3 would like to call Ms. Bowman. 4 HEARING OFFICER: Ms. Bowman, do you swear to tell the truth? 5 THE WITNESS: I do. 6 7 KATE BOWMAN, was called as a witness, and having been first duly 8 9 sworn to tell the truth, testified as follows: DIRECT EXAMINATION 10 11 BY MR. HOLMAN: 12 Q. Good morning, Ms. Bowman. Can you please state your name, employer, and title please? 13 14 My name is Kate Bowman, K-A-T-E, B-O-W-M-A-N. 15 I'm employed by Utah Clean Energy as the Renewable Energy 16 Program Manager. 17 Thank you. Did you submit comments in this 0. docket on May 14th and reply comments on May 31st? 18 Yes, I did. 19 Α. 20 Do you have any changes or additions to those Q. 21 to make today? 2.2 Α. No, I don't. 23 0. Do you accept those as your testimony here today as well? 24 25 Yes, I do. Α.

1	Page 34 MR. HOLMAN: I move to incorporate Ms. Bowman's
2	comments and reply comments into the record.
3	HEARING OFFICER: They're admitted.
4	MR. HOLMAN: Thank you.
5	Q. (By Mr. Holman) Ms. Bowman, do you have a
6	statement prepared today?
7	A. Yes, I do.
8	Q. Please proceed.
9	A. Thank you. I appreciate the opportunity to
10	provide input on the Company's application to implement
11	programs authorized by the STEP Act, and to summarize the
12	comments I provided on May 14th and May 31st.
13	Utah Clean Energy supports the Company's
14	efforts to improve grid resiliency and flexibility through
15	the development of the Intermodal Hub Project, the Battery
16	Demand Response Project, and the Advanced Resiliency
17	Management System. I recommend that the Commission approve
18	the Intermodal Hub Project and the Battery Demand Response
19	Project, which will provide the Company with the
20	opportunity to pilot the integration of distributed clean
21	energy technologies, including solar, battery storage, and
22	electric vehicles.
23	The Intermodal Hub Project is designed to
24	demonstrate the viability of managed electric vehicle
25	charging to reduce the costs associated with high wattage

Page 35 electric vehicle charges. The Company intends to use the 1 2 tools and lessons that result from this project to reduce 3 infrastructure and operating costs to customers resulting 4 from electric vehicle infrastructure deployment at future The lessons learned from this project can 5 sites in Utah. and should be used to optimize integration of renewable 6 7 energy resources by better aligning electricity usage with generation from these low cost resources. 8 9 The purpose of the Battery Demand Response Project is to pilot utility control of customer-sited 10 11 batteries for demand response in order to reduce peak 12 loading on the grid. The information garnered through this 13 project will help the Company to identify strategies for leveraging customer-owned, behind-the-meter battery storage 14 to realize benefits through reduced peak loading. Utility 15 control of customer-owned batteries is not the only model 16 17 through which behind-the-meter batteries can provide benefits to the grid, and any future consideration of rate 18 design related to customer-owned batteries should not rely 19 20 on the information gained through this pilot project in 21 isolation. 2.2 In reply comments, the Company stated that it 23 will provide stakeholders with quarterly updates on the 24 status and finding from all three proposed STEP projects. 25 This addresses Utah Clean Energy's comments related to

1	Page 36 program reporting, and I look forward to the opportunity to
2	participate in the quarterly update meetings.
3	Finally, Utah Clean Energy supports the
4	Company's intention to modernize the electric grid and to
5	improve communications and resiliency through the ARMS
6	Project, although I have reservations about the use of STEP
7	funding for this project.
8	The purpose of the STEP program, as I
9	understand it, is to fund innovative sustainability energy
10	and transportation projects that allow the Company to pilot
11	new programs or technologies, or that provide the Company
12	with the opportunity to gain experience operating new
13	technologies or systems. The rationale behind funding
14	these programs through the STEP surcharge is that the
15	utility would not be able to implement these programs
16	through its normal business operations or within the more
17	defined bounds of standard ratemaking. The STEP program is
18	not intended to fund capital upgrades that are generally
19	cost effective, even if those upgrades also improve
20	conservation, efficiency, or reliability. Tree trimming,
21	for example, also provides customers with benefits in the
22	form of reduced outages, but is funded through customer
23	rates.
24	As the proposed ARMS Project demonstrates, new
25	and improved distributed energy technologies are enabling

```
Page 37
     modernization of the grid and improving the flexibility and
 1
 2
     communications capacity of the distribution system.
 3
     grid modernization progresses, a coordinated and
 4
     transparent grid planning process should be used to align
     grid modernization efforts planned for the distribution
 5
     system with generation and transmission planning processes.
 6
 7
                 A defined grid planning process will help to
     evaluate the costs and benefits of new technologies
 8
     relative to other potential upgrades and to identify the
 9
     set of technologies that will result in the most cost
10
11
     savings and benefits for customers. The pace of new
12
     technology moves quickly, and an integrated grid planning
13
     process can be used to evaluate and coordinate the
     deployment of a variety of distribution level technologies,
14
15
     from communications equipment to distributed energy
16
     resources.
17
                 The need for an integrated grid planning
     process is illustrated by the situation the ARMS Project
18
                        The Company has requested $16.5 million
     seeks to address.
19
20
     for a project that relies on updating existing AMR meters
21
     to behave like AMI meters. The AMR meters are only halfway
22
     through their useful lives, and the larger issue at hand is
     that the Company is currently in a position where a widely
23
24
     implemented technology has fallen behind the industry
25
     standard halfway through its anticipated life. Traditional
```

1	Page 38 long term utility planning processes are not well suited to
2	evaluate and anticipate the rapid growth of distributed
3	energy technologies.
4	For these reasons, if the Commission approves
5	the Company's application for the ARMS Project I suggest
6	that it be accompanied by a Commission investigation into
7	integrated grid planning as recommended by WRA. This will
8	help to support the integration of this and other
9	distributed energy resource and technology projects to
10	inform grid modernization efforts, and to ensure that
11	customers are truly benefiting from grid modernization
12	expenditures.
13	The investigation could consider examples of
14	how distributed and grid planning processes that have been
15	implemented in other states, and how to best incorporate
16	distribution and generation planning in order to minimize
17	the burdens associated with additional reporting
18	requirements. That concludes my statement. Thank you.
19	Q. Thank you, Ms. Bowman.
20	MR. HOLMAN: Ms. Bowman is ready for questions
21	and cross examination.
22	HEARING OFFICER: Mr. Solander?
23	MR. SOLANDER: No questions.
24	HEARING OFFICER: Ms. Schmid?
25	MS. SCHMID: No question. Thank you.

1	Page 39
1	HEARING OFFICER: Mr. Moore?
2	MR. MOORE: Thank you. No questions.
3	HEARING OFFICER: Ms. Hayes?
4	MS. HAYES: No questions. Thank you.
5	HEARING OFFICER: And you have no other
6	witnesses, Mr. Holman?
7	MR. HOLMAN: That concludes our presentation.
8	Thank you.
9	HEARING OFFICER: Thank you. Is there anything
10	else before we adjourn?
11	MR. SOLANDER: Nothing from the Company.
12	HEARING OFFICER: All right. Thank you,
13	everyone.
14	(The hearing concluded at 11:00 a.m.)
15	
16	
17	
18	
19	
20	
21	
22	
23	
24	
25	

1	Page 40 CERTIFICATE		
2	STATE OF UTAH)		
3	: COUNTY OF SALT LAKE)		
4	I, Melinda J. Andersen, Certified Shorthand Reporter		
5	and Notary Public in and for the County of Salt Lake and		
6	State of Utah, do hereby certify:		
7	That the foregoing proceedings were taken before me at		
8	the time and place herein set forth, and were taken down by		
9	me in shorthand and thereafter transcribed into typewritten		
10	under my direction and supervision:		
11	That the foregoing 39 pages contain a true and correct		
12	transcription of my shorthand notes so taken.		
13	WITNESS MY HAND and official seal at Salt Lake City,		
14	Utah this 27th day of June, 2019.		
15	Melu da Chidesen		
16	My Commission Expires: Melinda J. Andersen, C.S.R.		
17	February 10, 2022		
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