1	Q.	Please state your name, business address, and present position with Rocky
2		Mountain Power (the "Company"), a division of PacifiCorp.
3	A.	My name is Paul H. Clements. My business address is 1407 West North Temple
4		Street, Suite 310, Salt Lake City, Utah 84116. My present position is Director,
5		Commercial Services for Rocky Mountain Power.
6	Q.	How long have you been in your present position?
7	A.	I have been in my present position since June 2015. I previously held similar
8		positions within PacifiCorp since December 2004.
9	Q.	Please describe your education and business experience.
10	A.	I have a B.S. in Business Management from Brigham Young University. I have
11		been employed with PacifiCorp since 2004 as an originator/power marketer
12		responsible for negotiating qualifying facility contracts, negotiating interruptible
13		retail special contracts, and managing wholesale or market-based energy and
14		capacity contracts with other utilities and power marketers. I also worked in the
15		merchant energy sector for approximately six years in pricing and structuring,
16		origination, and trading roles for Duke Energy and Illinova.
17	PUR	POSE AND SUMMARY OF TESTIMONY
18	Q.	What is the purpose of your testimony?
19	A.	The purpose of my testimony is to support the Company's application for approval
20		of a renewable energy service contract between Facebook, Inc. ("Facebook") and
21		Rocky Mountain Power ("the Contract"). Specifically, I provide a comprehensive

• Contract objective and basic structure;

overview of the material terms and conditions of the Contract, as follows:

22

23

24		<ul> <li>Contract rate calculation and rate design;</li> </ul>
25		Billing mechanics; and
26		Renewable resource procurement process.
27	Q.	Please summarize your testimony.
28	A.	The Contract allows Facebook, a potential new large customer in Utah, to meet all
29		of its energy needs with new renewable resources acquired on its behalf. The
30		Contract includes rates for when Facebook is served by those renewable resources
31		and rates for when Facebook is served by Company resources, either during periods
32		when Facebook is ramping up and still acquiring the renewable resources or periods
33		when the amount of renewable resources acquired does not match the Facebook
34		load.
35		
36		
37		
38		
39		
40		
41		
42		
43		rates reflect the costs incurred by the Company and in
44		some instances provide a benefit to all customers. The Company can serve the
45		Facebook load in the near-term with existing resources, so customers benefit if the
46		Facebook rate exceeds the marginal cost of energy.

Page 2 - Direct Testimony of Paul H. Clements - Redacted

The Contract includes a billing mechanism to account for two unique aspects related to the interaction of the renewable resource production and the energy consumption at the Facility: 1) variability in the monthly solar production and 2) variability in the percentage of load served by the renewable resource.

The Contract also includes procedures by which the parties work together to acquire the renewable resources. Facebook is responsible for the financial obligations under any contract between the Company and a renewable resource,

and adequate credit provisions are in place to ensure the Company and other

customers are protected in the event the Contract is terminated early.

## CONTRACT OBJECTIVE AND BASIC STRUCTURE

## Q. Please briefly describe the counterparty to the Contract.

- A. Facebook is a large technology company that desires to expand its global business operations by building one or more new data centers in phases in Utah. Facebook's objective is to meet some or all of its electricity needs with renewable resources. Facebook has stated that access to renewable energy is a prerequisite to siting its data center in Utah. The ability of the local utility to provide a contract that allows Facebook to achieve its objective is critical to its decision on where to locate.
- Q. Please describe the objective of the Facebook contract.
- A. The Company worked closely with Facebook to develop a contract that would meet its stated objective of procuring through the Company enough renewable resources

to meet 100 percent of the annual electric energy needs at its data center. Facebook, like most customers with renewable goals and like most state renewable portfolio standards, measures its objective on an annual kilowatt hour (kWh) basis. For example, if Facebook consumes 400 million kWh over the course of one year, it will purchase output from renewable resources that produce 400 million kWh over the course of one year. Facebook also desires to actively participate in the selection of the renewable resources to be acquired on its behalf and desires a contract structure that easily allows for additional renewable resources to be acquired as new data center phases are developed. Please describe the basic structure of the Facebook contract.

## Q.

70

71

72

73

74

75

76

77

78

79

80

81

82

83

84

85

86

87

88

89

90

92

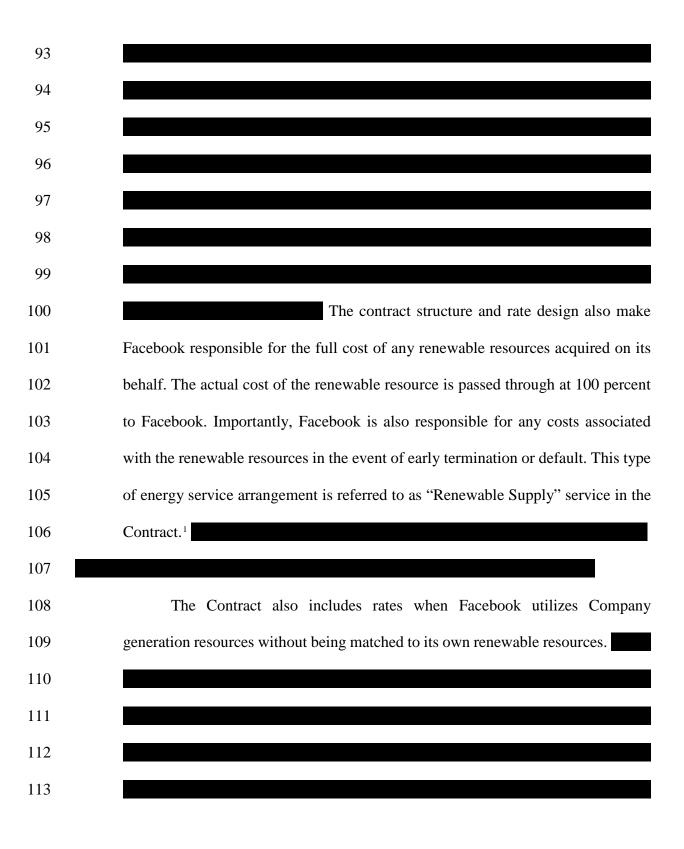
A.

The Contract incorporates where possible the general terms and conditions included in the Company's standard master electric service agreement. The Contract also includes terms consistent with Utah Code 54-17-806 and the Company's proposed Schedule 34, Renewable Energy Tariff.

The Contract first includes the general terms and conditions under which the Company will acquire a renewable resource(s) on Facebook's behalf. It then sets forth the rates for the electric service the Company will provide to Facebook.

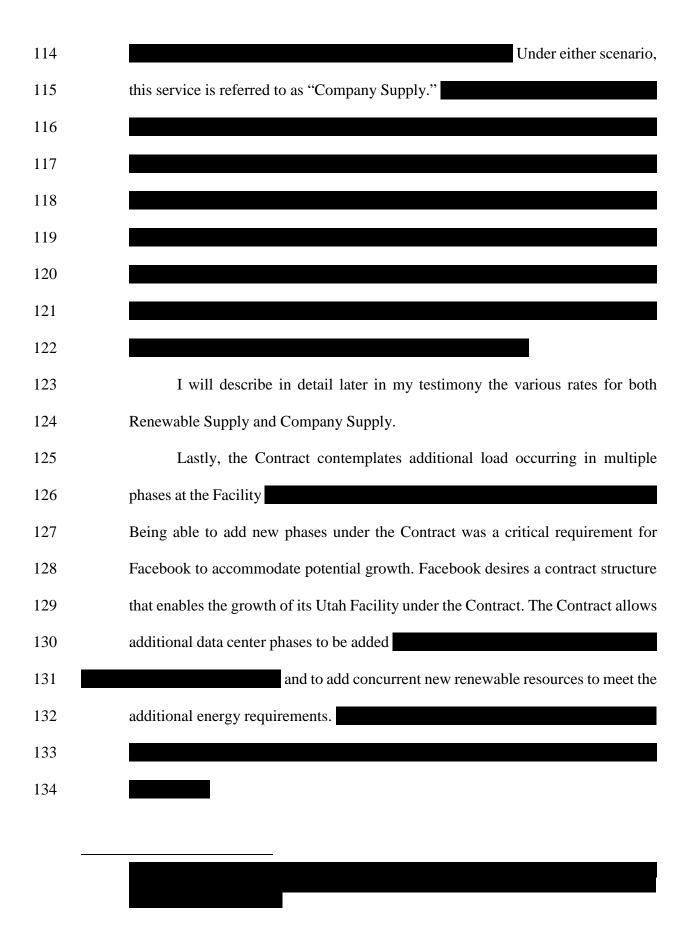
The Company expects to eventually meet all of Facebook's electric energy needs on an annual basis from specific new renewable resources to be acquired on behalf of Facebook.

91



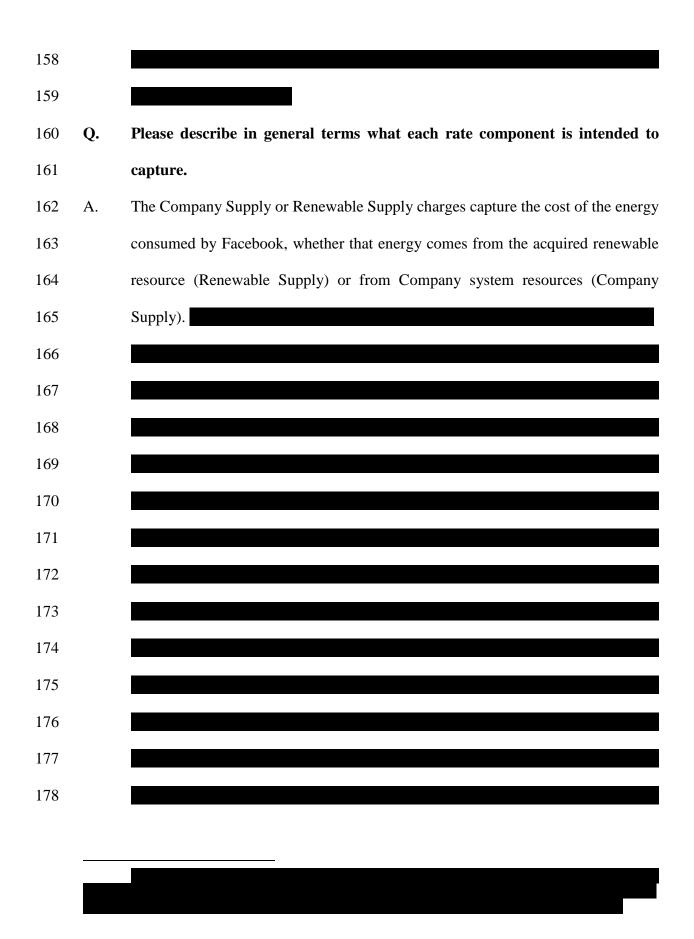
<sup>&</sup>lt;sup>1</sup> If not otherwise defined in my testimony, any capitalized terms used in my testimony refer to defined terms in the Contract.

Page 5 - Direct Testimony of Paul H. Clements - Redacted

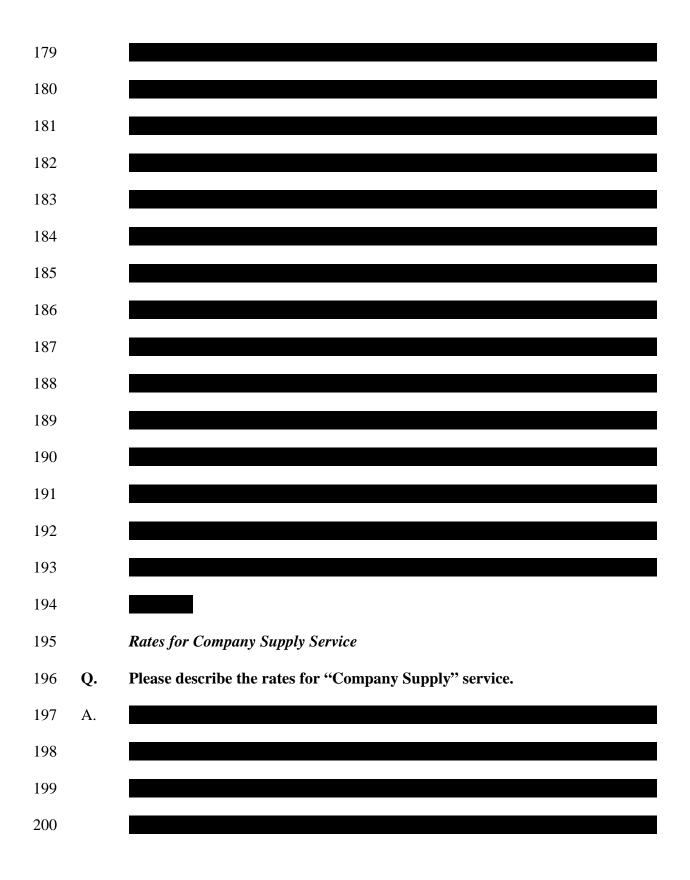


Page 6 - Direct Testimony of Paul H. Clements - Redacted

135	CON	TRACT RATE CALCULATION AND RATE DESIGN
136		General Overview
137	Q.	Please describe the rates included in the Contract.
138	A.	The Contract includes two different sets of rates depending on whether Facebook
139		is meeting its energy needs with Renewable Supply or if Facebook is utilizing
140		Company Supply.
141		
142		
143		
144		
145		
146		The Contract includes a Renewable Supply charge and a Company Supply
147		charge,
148		
149		
150		
151		
152		
153	Q.	Have you prepared an exhibit that illustrates the applicability of the various
154		charges to Renewable Supply and Company Supply?
155	A.	
156		
157		



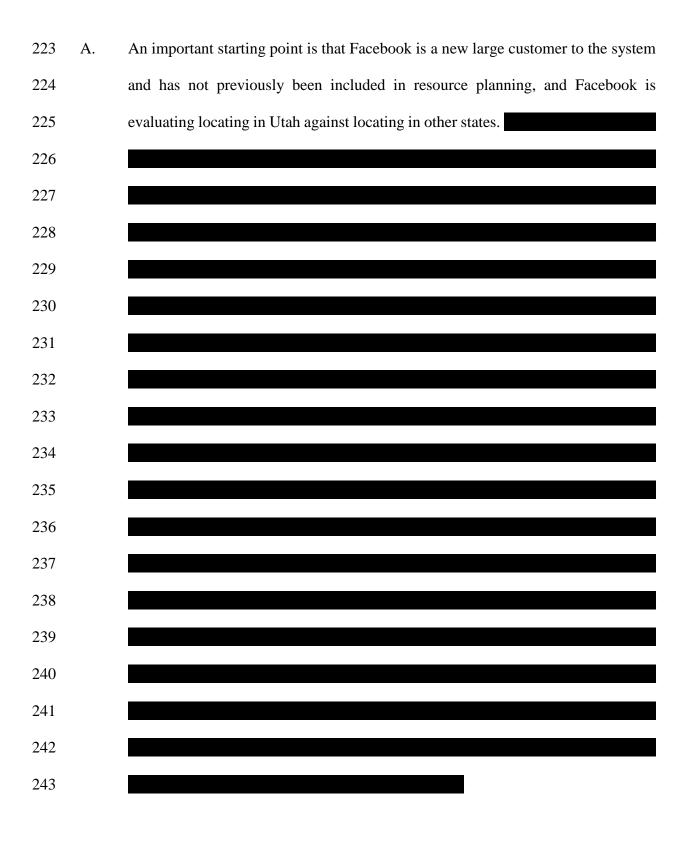
Page 8 - Direct Testimony of Paul H. Clements - Redacted



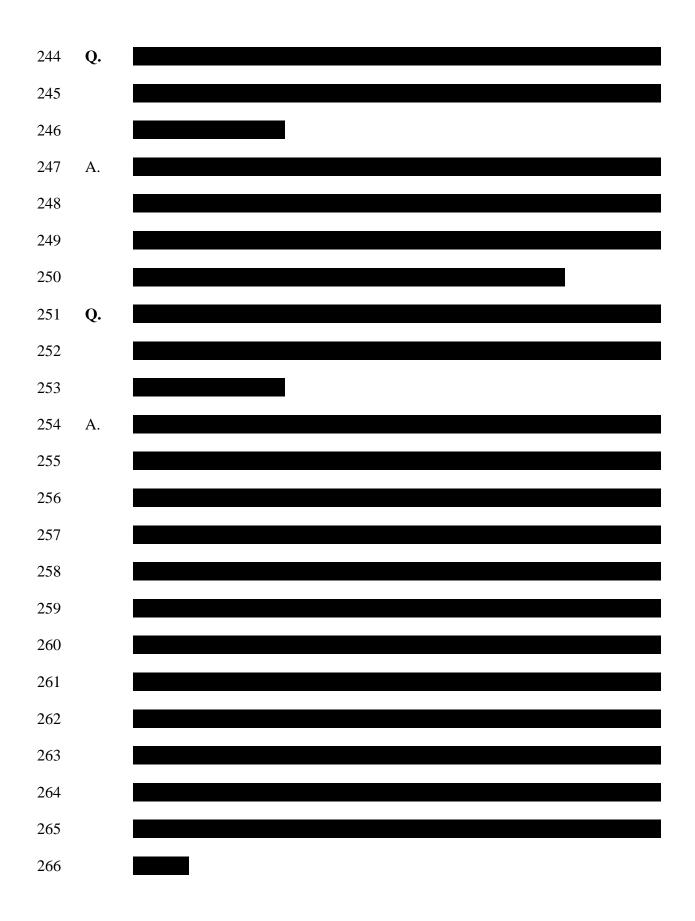
Page 9 - Direct Testimony of Paul H. Clements - Redacted

201		
202		
203		
204		Facebook has stated its intent to acquire an amount of renewable resources
205		sufficient to meet 100 percent of its annual usage. Given the large scale and energy
206		needs of the Facebook Facility, Facebook is able to utilize large, utility-scale
207		renewable projects to meet this objective with the additional benefit that larger
208		projects typically have lower cost due to economies of scale. The load at the Facility
209		will ramp up over time as the Facility reaches full capacity and grow further when
210		and if Facebook decides to build additional Facility Phases. Recognizing there
211		cannot be an exact match of the renewable resource additions as the Facility ramps
212		up load, there may be times that Facebook will require more Company Supply than
213		it will when it reaches steady-state operations.
214		
215		
216		
217		
218		
219		
220		
221		
222	Q.	

Page 10 - Direct Testimony of Paul H. Clements - Redacted



Page 11 - Direct Testimony of Paul H. Clements - Redacted



Page 12 - Direct Testimony of Paul H. Clements - Redacted

267 O. Does the Company expect to incur near-term incremental transmission and 268 generation costs to serve Facebook's load? 269 No. Figure ES.2 in the Executive Summary of the Company's 2015 Integrated Α. 270 Resource Plan Update (2015 IRP Update) shows a comparison of power and natural 271 gas prices and includes a concluding statement in the bullet below the figure that 272 says: "PacifiCorp's updated resource portfolio continues to show that customer 273 loads over the front ten years of the planning horizon will be met with front office 274 transactions (firm market purchases) and energy efficiency." This illustrates the 275 Company can reasonably meet Facebook's load with market 276 277 This is further supported by the lack of change in the 278 timing of the next major generation plant addition in the 2015 IRP Update. Figure 279 ES.1 in the Executive Summary of the 2015 IRP Update shows a material drop in the load forecast compared to the 2015 Integrated Resource Plan (2015 IRP). 280 281 Appendix A to the Executive Summary includes additional details related to the 282 load forecast. Between the 2015 IRP and the 2015 IRP Update, the forecast system 283 load between the period 2017 and 2025 dropped by an average of 204.7 MW.

Q. What conclusion can you draw from the information in the 2015 IRP Update as it relates to the new Facebook load?

However, this drop in the load forecast did not change the timing of the next

generation plant. It remains in 2028.

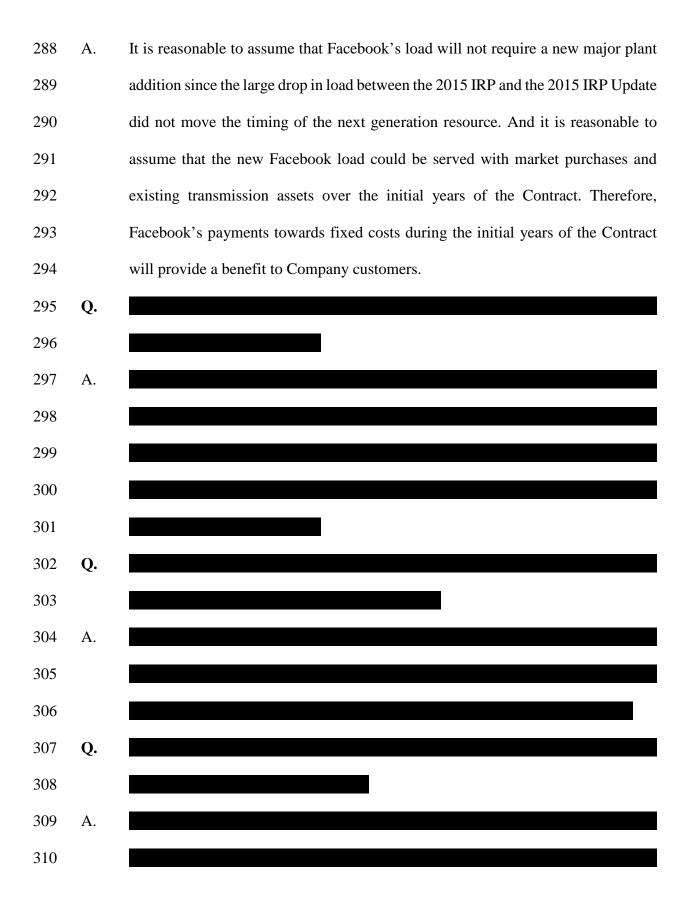
284

285

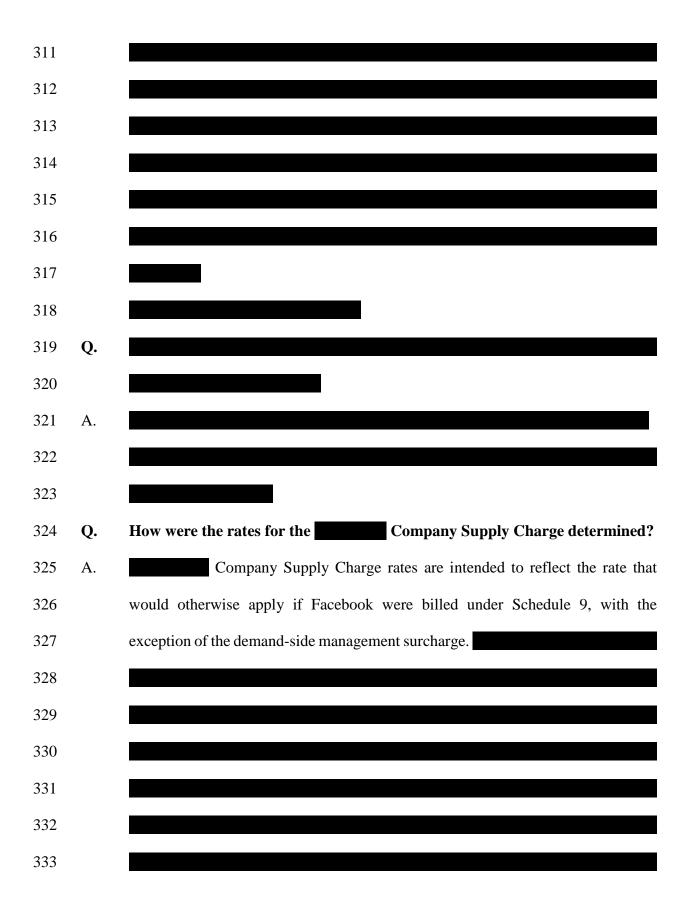
286

287

 $<sup>^4</sup>$  PacifiCorp – 2015 IRP Update, page 2.

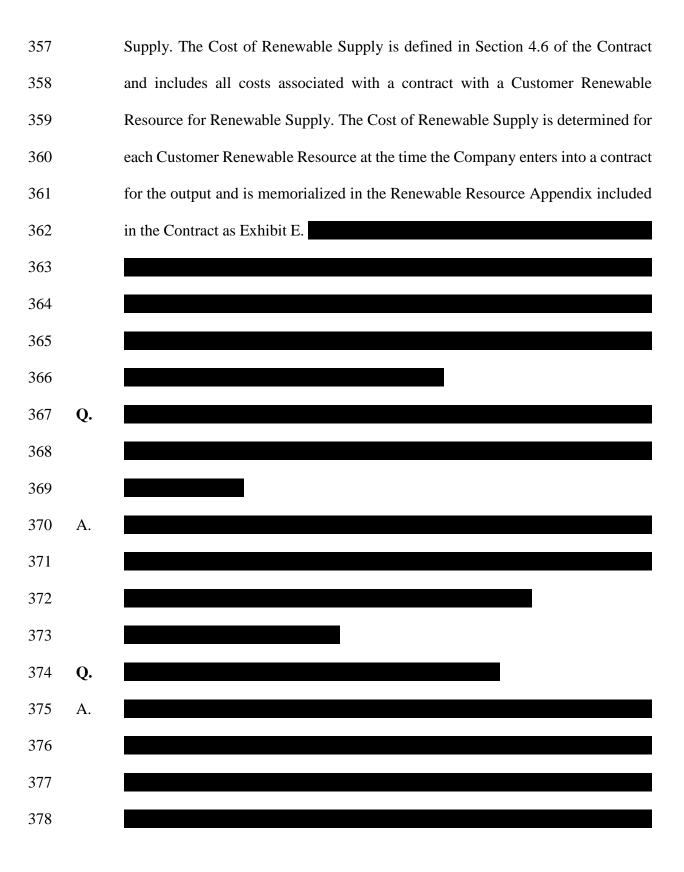


Page 14 - Direct Testimony of Paul H. Clements - Redacted

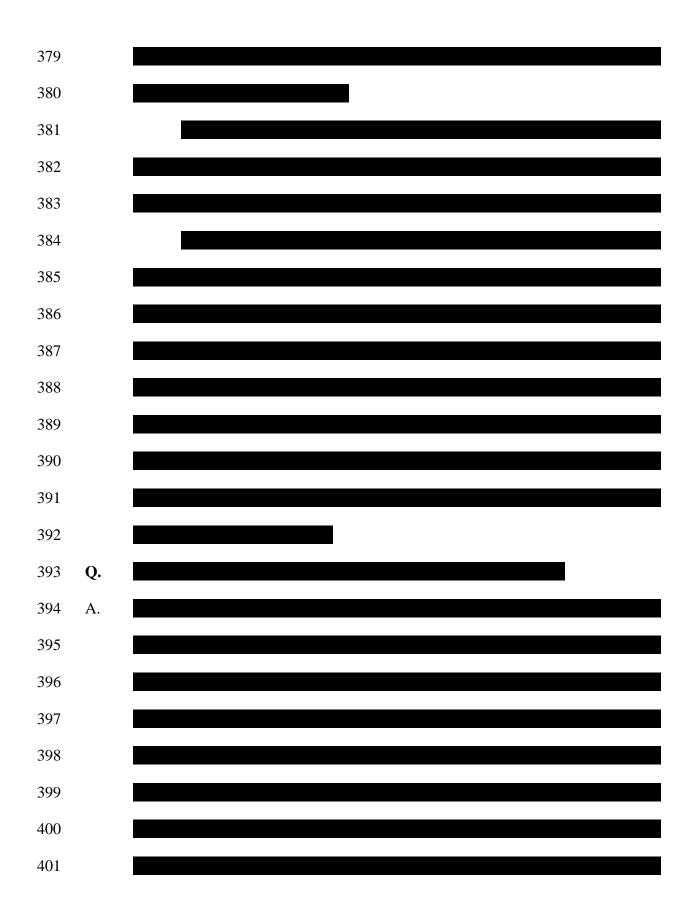


Page 15 - Direct Testimony of Paul H. Clements - Redacted

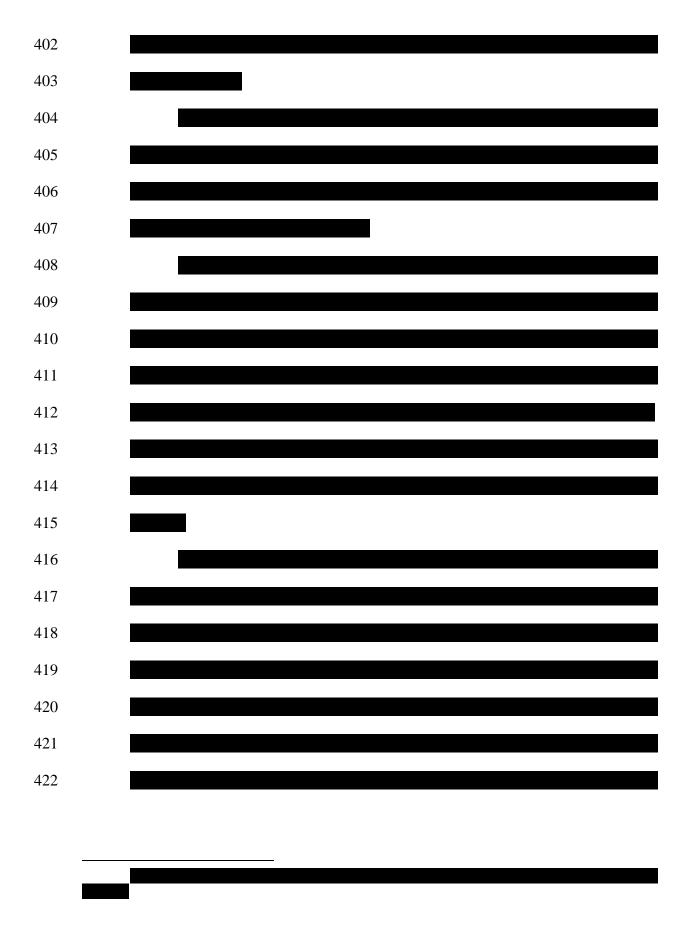
334		
335		
336	Q.	Does the Schedule 9-Based Rate used for the Company Supply
337		Charge change over the term of the Contract?
338	A.	Yes. The Schedule 9-Based Rate changes consistent with any changes to the
339		Schedule 9 tariff rates.
340	Q.	While not expected, if Facebook does not contract for any renewables, what
341		would be the applicable rate for service after the initial five year period?
342	A.	The rate would be Schedule 9-Based Rates for all service.
343		Rates for Renewable Supply Service
344	Q.	Please describe the rates for "Renewable Supply" service.
345	A.	The rates for Renewable Supply service recover costs incurred to provide Facebook
346		renewable energy equal to its load at the Facility, as measured on an annual kWh
347		basis. Under this scenario, the Company incurs costs to acquire the renewable
348		resource(s), costs due to transmission service and firming and shaping service, and
349		other costs that are captured elsewhere in the Contract
350		
351		The cost of the renewable resource(s) is captured in the Renewable Supply
352		Charge.
353		
354	Q.	How is the Renewable Supply Charge calculated?
355	A.	The Renewable Supply Charge is a weighted average charge applied to all kWh of
356		Renewable Supply delivered to Facebook and recovers the total Cost of Renewable



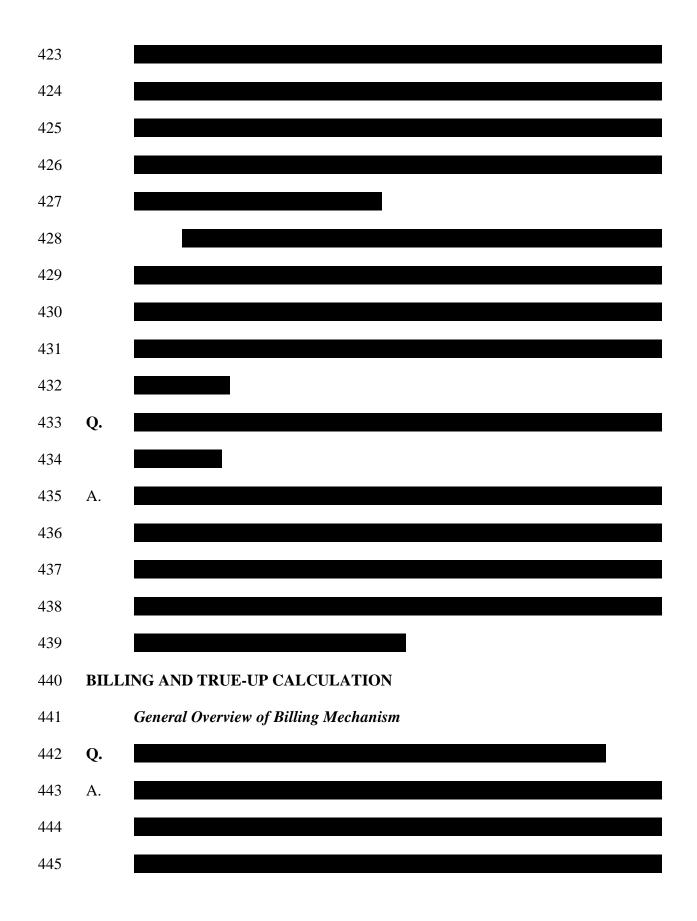
Page 17 - Direct Testimony of Paul H. Clements - Redacted



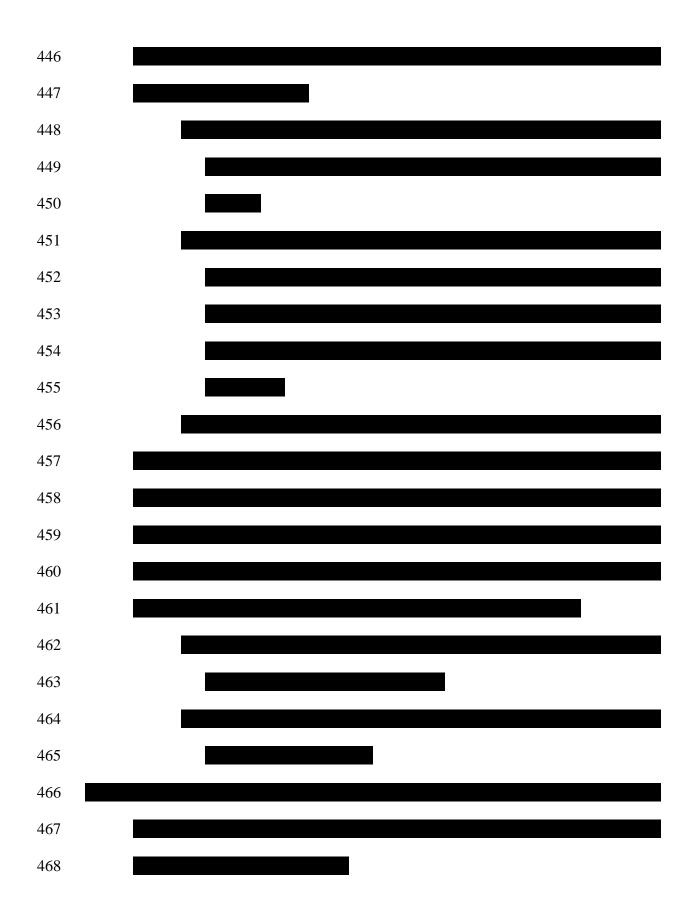
Page 18 - Direct Testimony of Paul H. Clements - Redacted



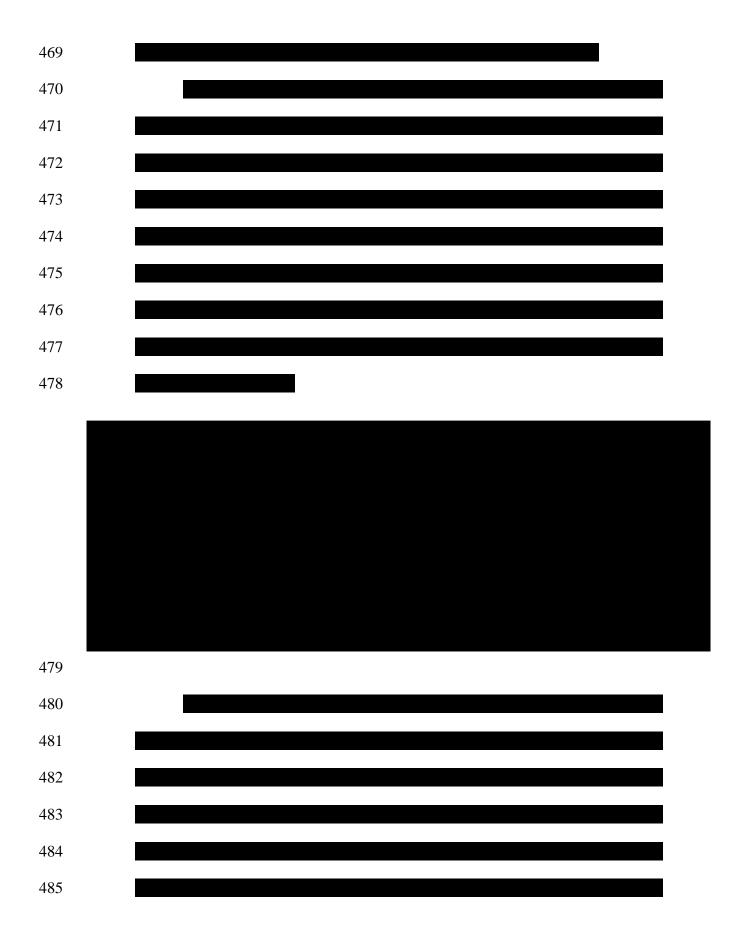
Page 19 - Direct Testimony of Paul H. Clements - Redacted



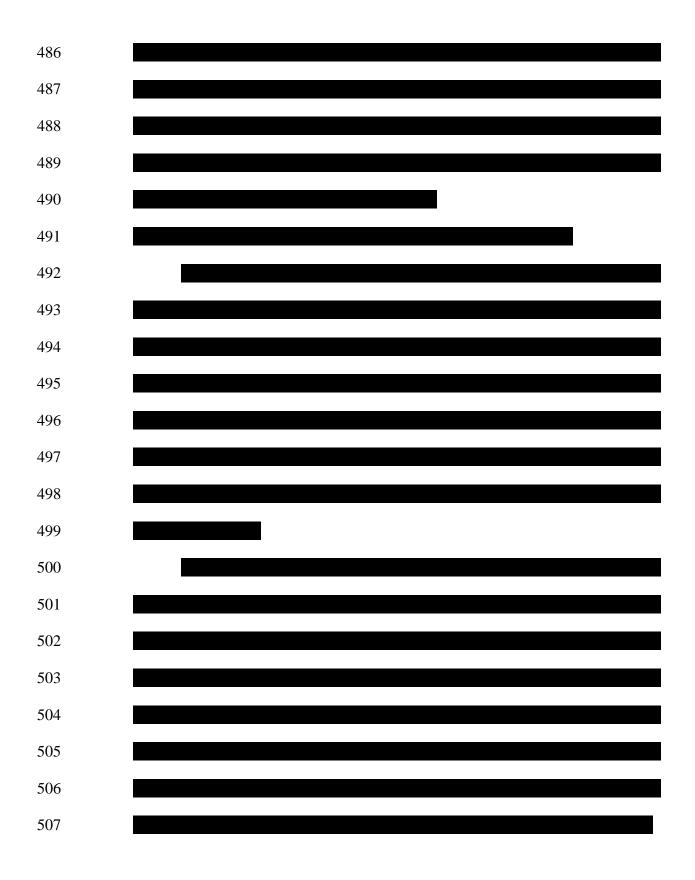
Page 20 - Direct Testimony of Paul H. Clements - Redacted



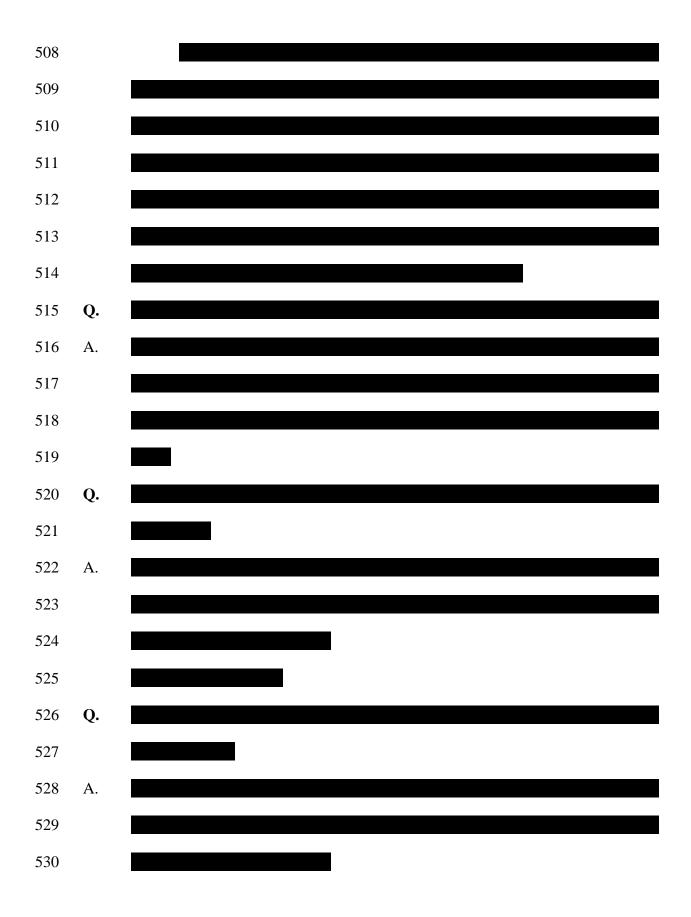
Page 21 - Direct Testimony of Paul H. Clements - Redacted



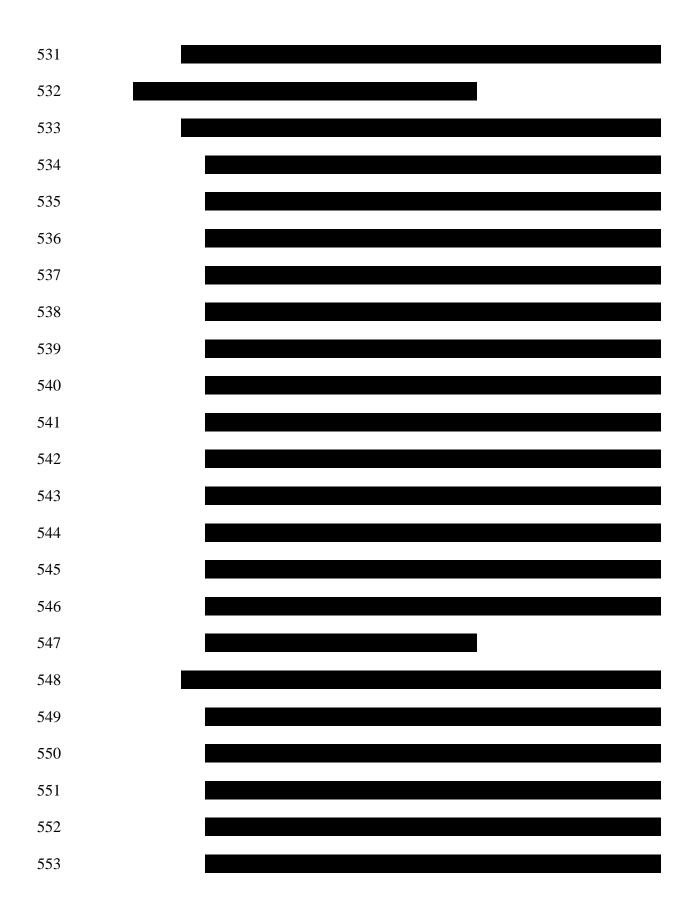
Page 22 - Direct Testimony of Paul H. Clements - Redacted



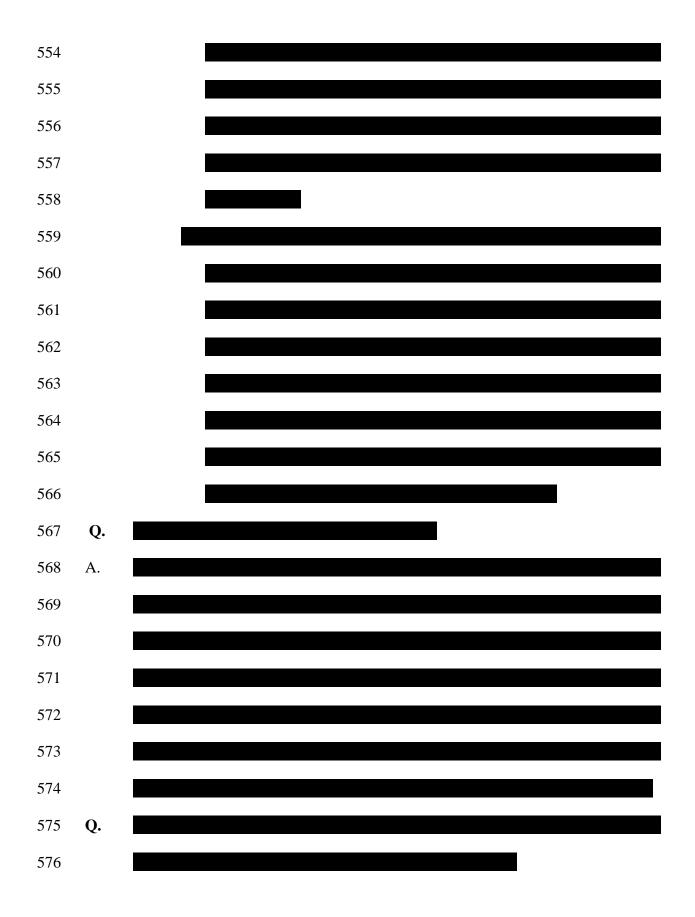
Page 23 - Direct Testimony of Paul H. Clements - Redacted



Page 24 - Direct Testimony of Paul H. Clements - Redacted



Page 25 - Direct Testimony of Paul H. Clements - Redacted



Page 26 - Direct Testimony of Paul H. Clements - Redacted

5//	A.	
578		
579		RENEWABLE RESOURCE PROCUREMENT
580	Q.	Please describe how Customer Renewable Resources will be acquired.
581	A.	As reflected in Section 4 in the Contract, Facebook will direct the Company to
582		initiate identification of a potential resource. Facebook will provide guidance
583		related to the terms and conditions it seeks, such as the type of renewable resource,
584		the size of the resource, the online date, and the desired location. Facebook will
585		also determine whether to ask the Company to issue a request for proposals or issue
586		its own request, or to instead negotiate bi-laterally with counterparties. Once the
587		terms and conditions of a Company solicitation have been agreed-to, the Company
588		will begin to identify and select the resource. The Contract contemplates a timeline
589		over which this activity will occur, but the timeline may be revised by mutual
590		consent.
591	Q.	What role will Facebook have in the negotiations with the renewable resource
592		counterparty?
593	A.	If the Company issues the request for proposals, it is expected that the Company
594		will lead the negotiations with the renewable resource counterparty. Facebook may
595		provide guidance and may participate directly during the negotiations.
596	Q.	Will Facebook be a party in the contract between the renewable resource
597		counterparty and the Company?
598	A.	No, the contract will be between the Company and the renewable resource
599		counterparty.
<ul><li>592</li><li>593</li><li>594</li><li>595</li><li>596</li><li>597</li><li>598</li></ul>	A. <b>Q.</b>	counterparty?  If the Company issues the request for proposals, it is expected that the Company will lead the negotiations with the renewable resource counterparty. Facebook may provide guidance and may participate directly during the negotiations.  Will Facebook be a party in the contract between the renewable resource counterparty and the Company?  No, the contract will be between the Company and the renewable resource counterparty.

600	Q.	What protections are in place to ensure the renewable resource contract is
601		$consistent\ with\ the\ terms\ and\ conditions\ included\ in\ other\ renewable\ contracts$
602		signed by the Company?
603	A.	The Company has the right to reject unacceptable terms or other conditions
604		associated with the renewable resource contract. Facebook must address the
605		Company's concerns or otherwise mitigate the identified risk to the Company's
606		satisfaction before the Company executes the contract. Ultimately, Facebook is
607		required in the Contract to backstop the obligations for each renewable resource.
608	Q.	How does the Company ensure the renewable resource contract is acceptable
609		to Facebook?
610	A.	Prior to execution, Facebook and the Company will create a Renewable Resource
611		Appendix for the resource where the material terms and conditions will be listed.
612		Facebook must agree in writing to those terms and conditions before the Company
613		executes the contract with the renewable resource counterparty.
614	Q.	Who is responsible for the costs, if any, incurred by the Company when
615		procuring a renewable resource under Section 4?
616	A.	The Company will inform Facebook of the expected costs to acquire a renewable
617		resource in advance of the procurement process. Once Facebook authorizes the
618		costs, Facebook will reimburse the Company for the costs.
619	Q.	Who is responsible for the costs associated with the renewable resource
620		contract once it is executed under Section 4?
621	A.	Facebook will be responsible for all costs associated with the contract between the
622		Company and the renewable resource counterparty. If the Contract is terminated

523		early, the financial obligation under the renewable resource contract remains with
524		Facebook. The Contract includes credit requirements that Facebook must meet in
525		order to protect the Company and other customers if the Contract is terminated
526		early and a financial obligation under the renewable resource contract remains.
527	Q.	Is the Company responsible if the renewable resource counterparty fails to
528		perform?
529	A.	No.
530	Q.	Does this conclude your direct testimony?
531	A.	Yes.