

David S. Samford david@gosssamfordlaw.com (859) 368-7740

September 9, 2016

RECEIVED

SEP 9 2016

PUBLIC SERVICE COMMISSION

#### Via Hand-Delivery

Dr. Talina R. Mathews, Ph.D. Executive Director Kentucky Public Service Commission 211 Sower Boulevard Frankfort, KY 40602

Re:

PSC Case No. 2016-00269 – Application of East Kentucky Power Cooperative, Inc. for Issuance of a Certificate of Public Convenience and Necessity, Approval of Certain Assumption of Evidences of Indebtedness and Establishment of a Community Solar Tariff

Dear Dr. Mathews:

On behalf of East Kentucky Power Cooperative, Inc. ("EKPC"), please find enclosed for filing in the record of the above-referenced case one (1) redacted original and ten (10) redacted copies of EKPC's Response to Commission Staff's First Request for Information propounded August 30, 2016. Also enclosed in a separate sealed envelope marked confidential is one (1) copy of the Response with certain confidential information highlighted.

In addition, please find enclosed for filing in the record of the above-referenced case one (1) original and ten (10) copies of EKPC's Motion to Schedule an Informal Conference. Also enclosed is the affidavit of Kentucky Press Service, Inc. and the newspaper classified advertisements providing notice of the Retail Community Solar Tariff Template pursuant to the Commission's August 17, 2016 Order.

Please do not hesitate to contact me if you have any questions or concerns.

Very truly yours, David & Sam Ford (by Egil Cowdon)

David S. Samford

Enclosures

#### COMMONWEALTH OF KENTUCKY

RECEIVED

#### BEFORE THE PUBLIC SERVICE COMMISSION

SEP 9 2016

In the Matter of:	PUBLIC SERVICE COMMISSION
THE APPLICATION OF EAST KENTUCKY POWER COOPERATIVE, INC. FOR ISSUANCE OF A CERTIFICATE OF PUBLIC CONVENIENCE AND NECESSITY, APPROVAL OF CERTAIN ASSUMPTION OF EVIDENCES OF INDEBTEDNESS AND ESTABLISHMENT OF A COMMUNITY SOLAR TARIFF	) ) ) Case No. 2016- 00269 )

#### MOTION FOR CONFIDENTIAL TREATMENT

Comes now East Kentucky Power Cooperative, Inc. ("EKPC"), by and through counsel, pursuant to KRS 61.878, 807 KAR 5:001, Section 13 and other applicable law, and for its Motion requesting that the Kentucky Public Service Commission ("Commission") afford confidential treatment to documents and information filed in response to certain requests for information in the above-captioned proceeding, respectfully states as follows:

Commission Staff issued its Initial Requests for Information on August 30, 2016.
 Request No. 10 states as follows:

Refer to the Crews Testimony at 9-13. Provide a copy of the NRECA Market Research Services study and its results.

2. In its response to Request No. 10, EKPC is providing a copy of the NRECA Market Research Services study and its results. This study contains proprietary market research that reveals the demographic, interests and preferences of EKPC and the retail customers of its Owner-

Members. If the study was made available to competitors it would provide them with a significant commercial advantage.

- 3. Request No. 14b from the August 30<sup>th</sup> request for information states as follows:
  - Starting at the bottom of page 18 and continuing on page 19, the testimony states that the ITO has indicated to EKPC that no limitations were identified that would preclude granting the requested service.
  - (1) Explain how this indication was communicated to EKPC by the ITO.
  - (2) Provide any report, letter, e-mail, or other communication of this indication from the ITO to EKPC.
- 4. In its response to Request No. 14b, EKPC is providing copies of email correspondence, a copy of the System Impact Study report provided by the ITO and a copy of the System Impact Study for the Small Generator Interconnection Process request. This information contains critical energy infrastructure pertaining to the physical facilities for generating and transmitting electricity in the region.
  - 5. Request No. 21 from the August 30<sup>th</sup> request for information states as follows:

    Provide the minutes of each Board meeting at which the proposed solar program was discussed.
- 6. In its response to Request No. 21, EKPC is providing copies of exerpts of minutes of Board meetings pertaining to the proposed solar program. The minutes of a corporate board are one of the most important and sensitive categories of corporate records and literally touch upon every aspect of the corporation's business. In particular, the minutes which include information responsive to the request include substantia information which is highly proprietary, commercially sensitive and irrelevant to the Request. Accordingly, EKPC is tendering redacted copies of the minutes under seal (the redacted portions are not solar related). EKPC is requesting confidential treatment of the unredacted portions of these minutes, which pertain to the solar project.
  - 7. Request No. 23 from the August 30<sup>th</sup> request for information states as follows:

Using the PJM hourly Locational Marginal Prices ("LMP") for July 2016, provide a sample bill from East Kentucky to one of its member cooperatives showing the impact had that member reserved 1 MW of the solar facility, compared to the bill that member cooperative would have received absent the solar program. Assume that the solar generation was uniform for each hour of the month in which the solar facility would generate power.

- 8. In its response to Request No. 23, EKPC is providing a sample of an actual Owner-Member's power bill summary page for July 2016, and an additional bill page from an actual Owner-Member's power bill showing the total amount billed for July 2016. The identity of the Owner-Member to which the bill pages pertain is redacted. This is sensitive, proprietary information regarding the amount of energy purchased and the amount paid by an Owner-Member.
- 9. The information and documents tendered by EKPC in response to Request No. 10, Request No. 14b, and Request No. 23 are being tendered in redacted form in the public version of EKPC's filing and in an unredacted form filed under seal herewith. The exerts of the Board minutes are only being filed under seal since even the redacted revision of the Board minutes should be kept confidential. Collectively, this information and these documents are hereinafter referred to as the "Confidential Information."
- 10. The Confidential Information contains extensive information that describes the proprietary market research, critical energy infrastructure, business planning and strategy of EKPC as well as information regarding the energy purchases of Owner-Members. This information is commercially sensitive and proprietary.
- 11. The Confidential Information is retained by EKPC on a "need-to-know" basis and is not publicly available. If disclosed, the Confidential Information would release critical market research, energy infrastructure information and the chronicle of the Board's deliberations and decision-making. This would give potential competitors and vendors a tremendous competitive

advantage. These market advantages would likely translate into higher costs for EKPC and, by extension, detrimentally higher rates for EKPC's Members. Thus, disclosure of the Confidential Information would be highly prejudicial to EKPC, EKPC's Members and those Members' retail customers.

- 12. The Kentucky Open Records Act exempts the Confidential Information from public disclosure. See KRS 61.878(1)(c),(m). As set forth above, disclosure of the Confidential Information would permit an unfair advantage to third parties. Moreover, the Kentucky Supreme Court has stated, "information concerning the inner workings of a corporation is 'generally accepted as confidential or proprietary." Hoy v. Kentucky Industrial Revitalization Authority, 907 S.W.2d 766, 768 (Ky. 1995). Because the Confidential Information is critical to EKPC's effective execution of business decisions and strategy, it satisfies both the statutory and common law standards for being afforded confidential treatment.
- 13. Likewise, KRS 61.878(1)(m)(1) additionally protects "[p]ublic records the disclosure of which would have a reasonable likelihood of threatening public safety by exposing a vulnerability in preventing protecting against, mitigating, or responding to a terrorist act....," and specifically exempts from public disclosure certain records pertaining to public utility critical systems. See KRS 61.878(1)(m)(1)(f). If disclosed, the information provided as part of EKPC's response to Item 14b of Commission Staff's request for information could be utilized to commit or further a criminal or terrorist act, disrupt critical public utility systems, and/or intimidate or coerce the civilian population. Disclosure of this Confidential Information could result in the disruption of innumerable other infrastructure systems which relate to, or rely upon, the safe and reliable provision of electricity. Moreover, disclosure of the critical energy infrastructure information could have a reasonable likelihood of threatening the public safety. Maintaining the

confidentiality of all the Confidential Information relating to energy infrastructure is necessary to protect the interests of EKPC, its Owner-Members and end-use Members, and the region at large.

- 14. EKPC does not object to limited disclosure of the Confidential Information, pursuant to an acceptable confidentiality and nondisclosure agreement, to any intervenors with a legitimate interest in reviewing the same for the sole purpose of participating in this case.
- 15. In accordance with the provisions of 807 KAR 5:001, Section 13(2), EKPC is filing one copy of the Confidential Information separately under seal. The filing of the Confidential Information is noted in the public version of EKPC's response to Request No. 10, Request No. 14b, Request No. 21 and Request No. 23 which include redacted copies of such information. Due to the pervasive nature of the confidential and proprietary information included in the Confidential Information, confidential treatment is sought for the entirety of the Confidential Information provided in response to Request No. 14b and Request No. 21. Confidential treatment is sought for all of the information provided in response to Request No. 10 except for slides 1-6. Confidential treatment is only being sought for the Owner-Member's name and address for the information provided in response to Request No. 23.
- 16. In accordance with the provisions of 807 KAR 5:001, Section 13(3), EKPC respectfully requests that the Confidential Information be withheld from public disclosure for a period of ten years. This will assure that the Confidential Information if disclosed after that time will be less likely to include information that continues to be commercially sensitive so as to impair the interests of EKPC if publicly disclosed. However, EKPC reserves the right to seek an extension of the grant of confidential treatment if it is necessary to do so at that time.

WHEREFORE, on the basis of the foregoing, EKPC respectfully requests the Commission to enter an Order granting this Motion for Confidential Treatment and to so afford such protection

from public disclosure to the unredacted copies of Confidential Information, which is filed herewith under seal, for a period of ten years from the date of entry of such an Order.

This 9th day of September, 2016.

Respectfully submitted,

Mark David Goss
David S. Samford
L. Allyson Honaker
GOSS SAMFORD, PLLC
2365 Harrodsburg Road, Suite B325
Lexington, KY 40504
(859) 368-7740
mdgoss@gosssamfordlaw.com
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allyson@gosssamfordlaw.com

Counsel for East Kentucky Power Cooperative, Inc.

#### CERTIFICATE OF SERVICE

This is to certify that a true and correct copy of the foregoing has been served, by delivering same to the custody and care of the U.S. Postal Service, postage pre-paid, this 9<sup>th</sup> day of September, 2016, addressed to the following:

Mr. Michael L. Kurtz, Esq. Boehm, Kurtz & Lowry 36 East Seventh Street Suite 1510 Cincinnati, Ohio 45202

Counsel for East Kentucky Power Cooperative, Inc.

#### In the Matter of:

APPLICATION OF EAST KENTUCKY POWER	)	
COOPERATIVE, INC. FOR ISSUANCE OF A	j	
CERTIFICATE OF PUBLIC CONVENIENCE AND	j	CASE NO.
NECESSITY, APPROVAL OF CERTAIN	)	2016-00269
ASSUMPTION OF EVIDENCES OF	j	
INDEBTEDNESS AND ESTABLISHMENT OF A	Ć	
COMMUNITY SOLAR TARIFF	í	

RESPONSES TO COMMISSION STAFF'S FIRST REQUEST FOR INFORMATION TO EAST KENTUCKY POWER COOPERATIVE, INC.

DATED AUGUST 30, 2016

In the Matter of:			
APPLICATION OF EAST KENTUCKY POWER COOPERATIVE, INC. FOR ISSUANCE OF A CERTIFICATE OF PUBLIC CONVENIENCE AND NECESSITY, APPROVAL OF CERTAIN ASSUMPTION OF EVIDENCES OF INDEBTEDNESS AND ESTABLISHMENT OF A COMMUNITY SOLAR TARIFF	) ) ) ) )	CASE NO. 2016-00269	
CERTIFICATE			
STATE OF KENTUCKY ) ) COUNTY OF CLARK )			
Darrin Adams, being duly sworn, states that he has	supervise	ed the preparation of	he
responses of East Kentucky Power Cooperative, Inc. to the	Public Ser	rvice Commission Sta	ff's
First Request for Information in the above-referenced case d	lated Augu	ast 30, 2016, and that	he
matters and things set forth therein are true and accurate to the	e best of his	. 1	on
and belief formed after reasonable inquiry			

Subscribed and sworn before me on this

gHL day of September 2016.

GWYN M. WILLOUGHBY Notary Public State at Large

Kentucky My Commission Expires Nov 30, 2017

In the Matter of:

APPLICATION OF EAST KENTUCKY POWER	)	
COOPERATIVE, INC. FOR ISSUANCE OF A	)	
CERTIFICATE OF PUBLIC CONVENIENCE AND	)	CASE NO.
NECESSITY, APPROVAL OF CERTAIN	)	2016-00269
ASSUMPTION OF EVIDENCES OF	)	
INDEBTEDNESS AND ESTABLISHMENT OF A	)	
COMMUNITY SOLAR TARIFF	)	

**CERTIFICATE** 

COUNTY OF Hamilton

Todd Bartling, being duly sworn, states that he has supervised the preparation of the responses of East Kentucky Power Cooperative, Inc. to the Public Service Commission Staff's First Request for Information in the above-referenced case dated August 30, 2016, and that the matters and things set forth therein are true and accurate to the best of his knowledge, information and belief, formed after reasonable inquiry.

Notary Public

Subscribed and sworn before me on this 6th day of September 2016.

Beth A. Burrows
Resident Of
Marion County
My Commission Expires:
8/24/2024

In the Matter of:		
APPLICATION OF EAST KENTUCKY POWER COOPERATIVE, INC. FOR ISSUANCE OF A CERTIFICATE OF PUBLIC CONVENIENCE AND NECESSITY, APPROVAL OF CERTAIN ASSUMPTION OF EVIDENCES OF INDEBTEDNESS AND ESTABLISHMENT OF A COMMUNITY SOLAR TARIFF		CASE NO. 2016-00269
CERTIFICATE		
STATE OF KENTUCKY )  COUNTY OF CLARK )		

Michelle K. Carpenter, being duly sworn, states that she has supervised the preparation of the responses of East Kentucky Power Cooperative, Inc. to the Public Service Commission Staff's First Request for Information in the above-referenced case dated August 30, 2016, and that the matters and things set forth therein are true and accurate to the best of her knowledge, information and belief, formed after reasonable inquiry.

Subscribed and sworn before me on this 4th day of September 2016.

Soo NY Notary Public

GWYN M. WILLOUGHBY Notary Public State at Large Kentucky

My Commission Expires Nov 30, 2017

In the Matter of:		
APPLICATION OF EAST KENTUCKY POWER COOPERATIVE, INC. FOR ISSUANCE OF A CERTIFICATE OF PUBLIC CONVENIENCE AND NECESSITY, APPROVAL OF CERTAIN ASSUMPTION OF EVIDENCES OF INDEBTEDNESS AND ESTABLISHMENT OF A COMMUNITY SOLAR TARIFF	) ) ) )	CASE NO. 2016-00269
CERTIFICATE		

STATE OF KENTUCKY COUNTY OF CLARK

David Crews, being duly sworn, states that he has supervised the preparation of the responses of East Kentucky Power Cooperative, Inc. to the Public Service Commission Staff's First Request for Information in the above-referenced case dated August 30, 2016, and that the matters and things set forth therein are true and accurate to the best of his knowledge, information and belief, formed after reasonable inquiry.

Subscribed and sworn before me on this 4th day of September 2016.

GWYN M. WILLOUGHBY

**Notary Public** 

State at Large Kentucky

In the Matter of:		
APPLICATION OF EAST KENTUCKY POWER COOPERATIVE, INC. FOR ISSUANCE OF A CERTIFICATE OF PUBLIC CONVENIENCE AND NECESSITY, APPROVAL OF CERTAIN ASSUMPTION OF EVIDENCES OF INDEBTEDNESS AND ESTABLISHMENT OF A COMMUNITY SOLAR TARIFF		CASE NO. 2016-00269
CERTIFICATE		
STATE OF KENTUCKY )  COUNTY OF CLARK )		

Tom Stachnik, being duly sworn, states that he has supervised the preparation of the responses of East Kentucky Power Cooperative, Inc. to the Public Service Commission Staff's First Request for Information in the above-referenced case dated August 30, 2016, and that the matters and things set forth therein are true and accurate to the best of his knowledge, information and belief, formed after reasonable inquiry.

Subscribed and sworn before me on this 4th day of September 2016.

GWYN M. WILLOUGHBY Notary Public State at Large

Kentucky My Commission Expires Nov 30, 2017

## EAST KENTUCKY POWER COOPERATIVE, INC. PSC CASE NO. 2016-00269 RESPONSE TO INFORMATION REQUEST

COMMISSION STAFF'S FIRST REQUEST FOR INFORMATION DATED 08/30/16 REQUEST 1

RESPONSIBLE PARTY: David Crews

Refer to the Application at 5. Provide the basis for the expected capacity factor of approximately 20 percent.

Response 1. The Lendlease proposal stated that "Based on the solar resource at the site, the facility is designed to produce 14.9 GWh per year". For an 8.5 MW facility, this energy output represents a 20% capacity factor. 14,900 MWh/yr / (8.5 MW x 8760 hrs/yr) = 14,900/74,460 = 0.20 x 100 = 20%.

## EAST KENTUCKY POWER COOPERATIVE, INC. PSC CASE NO. 2016-00269 RESPONSE TO INFORMATION REQUEST

COMMISSION STAFF'S FIRST REQUEST FOR INFORMATION DATED 08/30/16 REQUEST 2

RESPONSIBLE PARTY: Darrin Adams and Michelle K. Carpenter

Refer to the Application at 6 regarding Network Integration Transmission Service ("NITS") billing. Provide an example of the load-demand billing for a given delivery point at the time of the Louisville Gas and Electric Company and Kentucky Utilities Company ("LG&E/KU") monthly peak.

Response 2. An example of the billing for the Van Meter Tap delivery point for July 2016 (Attachment 2-1) can be viewed on Page 3 of this response. This delivery point includes the EKPC Office substation that the proposed solar project will be connected to, as well as the Treehaven and Van Meter distribution substations. Attachment 2-1 shows the date and time of the LG&E/KU monthly peak as July 26 at 4:00 PM. The total demand for the Van Meter delivery point (the total of the EKPC Office, Treehaven, and Van Meter distribution substations) at that time was 4.5 MW. As shown on the last line of Attachment 2-1, EKPC is currently charged a NITS transmission rate of \$1,725 per MW-month, a Schedule 1 rate of \$78 per MW-month, and a Schedule 2 rate of \$40 per MW-month. Schedules 1 (Scheduling, System Control

and Dispatch Service) and 2 (Reactive Supply and Voltage Control) are required ancillary services that transmission customers must acquire from LG&E/KU. The total transmission charge for the Van Meter delivery point for July 2016 is \$8,293.50 based on the totals calculated for the NITS charge and Schedules 1 and 2. This amount is apportioned between KU and LG&E based on percentages set by LG&E/KU, as shown on Attachment 2-1.

	ATTACHMENT 2-1	ATTACHM	ENT 2-1					
EKPC	SELECTION IN	pay 2016	BILLING MONT	н	July 2016			
LG&E/KU Monthly	Peak 7/26/2016 4:00:00 PM							
	Data from EKPC Metering	4.5	Energy	⊾nergy	68.21%	66.26%	78.98%	
Delivery Point	Van Meter Tap	Firm Demands	Scheduled (MWH) Received	Scheduled (MWH) Delivered	Transmission Charge	Schedule 1 Charge	Schedule 2 Charge	
	KU (NITS) Firm Revenue	3.07 MW			\$5,294.80	\$232.57	\$142.16	\$5,669.54
	KU (SFP) Firm Revenue KU Non-Firm Revenue	0 MW	0 MWH 0 MWH	0 MWH 0 MWH	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	
	LG&E (NITS) Firm Revenue	1.43 MW			\$2,467.70	\$118.43	\$37.84	\$2,623.96
	LG&E (SFP) Firm Revenue LG&E Non-Firm Revenue	0 MW	0 MWH 0 MWH	0 MWH 0 MWH	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	
	Total Transmission Charges		100	_ garmigal	\$7,762.50	\$351.00	\$180.00	\$8,293.50
1,100	DEI	4.50 MW						
		50 MW			7,762.50	351.00	180.00	
Total Short Term F Total Non-Firm Tra	irm Transmission (< than 1 year)	0	0	0	0.00	0.00	0.00	
Total Charges	IISIIIISSIOII		U	0	\$7,762.5	\$351.	\$180.	\$8,293.5
POINT-TO-POINT SERVICE	_		Check		\$7,762.50 \$0.00	\$351.00 \$0.00	\$180.00 \$0.00	
Transmis Schedu sion Rate 1 Rate	2.35   Care 1   Care	oFF-PE ansmis Schedule 1 n Rate Rate	Schedule 2 Rate	Multiplier 0	Transmission Charge \$7,762.5	Schedule 1 Charge \$351.	Schedule 2 Charge \$180.	Energy

EAST KENTUCKY POWER COOPERATIVE, INC.
PSC CASE NO. 2016-00269
RESPONSE TO INFORMATION REQUEST

COMMISSION STAFF'S FIRST REQUEST FOR INFORMATION DATED 08/30/16

**REQUEST 3** 

**RESPONSIBLE PARTY:** 

**David Crews** 

Refer to the Application at 6 regarding participants having the option to either retire or receive credit for the disposition of renewable energy credits. The value for this is to "[b]e determined separately from the Project's interaction with PJM." Explain how and when this value will be determined.

Response 3. The value of renewable energy credits ("RECs") is determined by sales or pricing of RECs in the preceding year. Brokers will be contacted at least quarterly to determine the value of current RECs that are ready to be sold. The RECs could be sold or purchased by EKPC but the value of the RECs will be determined based on the market price of RECs. As described in paragraph 5.4 of the License Agreement, the revenue to be distributed to Customers that choose to sell the RECs is based on the revenue EKPC collects from REC sales in the preceding year. REC sale revenue from the preceding year will be distributed on a monthly basis the following year.

EAST KENTUCKY POWER COOPERATIVE, INC.
PSC CASE NO. 2016-00269
RESPONSE TO INFORMATION REQUEST

COMMISSION STAFF'S FIRST REQUEST FOR INFORMATION DATED 08/30/16

REQUEST 4

**RESPONSIBLE PARTY:** 

**David Crews and Tom Stachnik** 

Refer to the Application at 7 where EKPC refers to its RFP as having stated that proposals with an expected commercial operation date of December 31, 2016, were preferred in order to potentially make use of certain federal tax credits. It goes on to state that "[E]KPC is using an alternative financing option which makes the December 31, 2016 date less critical." Refer also to the Application at 9, which refers to other forms of financing considered that would have attempted to take advantage of a federal tax credit, and to page 22, in which EKPC requests the Commission to grant the relief requested by December 1, 2016.

Request 4a. Explain whether the assertion that the financing option chosen by EKPC, New Clean Renewable Energy Bonds ("New CREBs") "makes the December 31, 2016 date less critical" means that the project will not be able to use the federal tax credits it could potentially use under other forms of financing.

Response 4a. The project will not be using the federal tax credit since New CREBs are being used. New CREBs are available to tax-exempt entities in lieu of the tax credit.

Refer to the Direct Testimony of Todd Bartling ("Bartling Testimony") at 6, which states that, "[a]t the time of the [Request for Proposal ("RFP")], projects with a Commercial Operation Date ("COD") of December 31, 2016 or earlier were preferred because they would likely qualify for federal investment tax credits .... (Emphasis added.) Explain whether the proposed project, as described in the application, would qualify for the investment tax credits referenced by Mr. Bartling if the Commission granted EKPC's requested relief by December 1, 2016.

Response 4b. As mentioned above the project will not be using the tax credit as it will be taking advantage of New CREBs instead. EKPC is unable to utilize the tax credits without entering into a complex tax-equity relationship with a taxable entity. The availability of New CREBS made the tax credits less attractive as a financing mechanism.

Request 4c. If the project does not qualify for federal tax credits, explain why EKPC requests that the Commission issue a decision by December 1, 2016.

Response 4c. A December decision by the Commission allows EKPC to authorize the contractor to begin this project. The current schedule is for the contractor to perform detailed design and major procurement activities during the winter and spring. Detailed design and major procurement activities will be completed by April 2017. Construction is scheduled to

begin in May of 2017. This schedule allows for construction during optimal weather conditions and supports a commercial operation date of November 1, 2017.

Page 1 of 2

### EAST KENTUCKY POWER COOPERATIVE, INC. PSC CASE NO. 2016-00269

#### RESPONSE TO INFORMATION REQUEST

COMMISSION STAFF'S FIRST REQUEST FOR INFORMATION DATED 08/30/16 REQUEST 5

RESPONSIBLE PARTY: Tom Stachnik

Refer to the Application at 8 regarding the New CREBS financing.

Request 5a. Explain whether the National Rural Utilities Cooperative Financing Corporation ("CFC") is the only participant in the program to which EKPC would issue taxable bonds.

Response 5a. Yes, EKPC would issue the entire amount of the bonds to CFC.

Request 5b. Clarify whether the CFC bond rate has the same meaning as the "IRS Tax Credit Bond Rate."

Response 5b. No. The CFC bond rate is the rate offered to EKPC for the financing. The IRS "Qualified Tax Credit Bond Rate" is a rate published daily by the US treasury at https://www.treasurydirect.gov/GA-SL/SLGS/selectQTCDate.htm

Request 5c. The CFC bond rate as of June 7, 2016, was 4.00 percent and the subsidy, supposedly set at 70 percent of the published Internal Revenue Service Tax Credit Bond rate, was 2.99 percent. That percentage, 2.99, divided by 4.00, equals 74.75 percent, not 70 percent.

- (1) Explain the discrepancy and, if such discrepancies occur frequently, explain whether it is typical for the discrepancy to favor the borrower.
  - (2) Provide the CFC bond rate as of the most recent date available.

Response 5c(1). These are two separate rates which are not directly related. In general EKPC has seen the IRS rate higher than the CFC rate, so the subsidy will likely be more than 70% of the CFC rate.

Response 5c(2). The August 30, 2016 indicative CFC bond rate for a 25-year amortizing loan would be 3.6%. The IRS rate as of August 30, 2016 is 3.90%. The current net financing rate would thus be 3.6% - 0.7(3.9%) = 0.87%

## EAST KENTUCKY POWER COOPERATIVE, INC. PSC CASE NO. 2016-00269 RESPONSE TO INFORMATION REQUEST

COMMISSION STAFF'S FIRST REQUEST FOR INFORMATION DATED 08/30/16 REQUEST 6

RESPONSIBLE PARTY: David Crews

Refer to the Application at 9. East Kentucky proposes the License Fee for a single panel will be \$460.

Request 6a. Confirm that the License Fee is expected to be paid in full at the time the customer enrolls in the program.

**Response 6a.** The License Fee is to be paid in full at the time of the enrollment.

**Request 6b.** State whether East Kentucky considered structuring the License Fee as smaller monthly payments, rather than as a larger one-time payment.

Response 6b. EKPC considered structuring the License Fee as a smaller, monthly installment payment arrangement. EKPC ultimately concluded that the one-time, lump-sum payment would be easier and quicker to implement. EKPC plans to revisit this issue in one to

two years after the facility is available to be licensed. This will allow EKPC and its Owner-Members to evaluate the initial licensing rate and to potentially offer installment payments in the course of routine upgrades to billing software. Due to the nature of the billing and crediting process for the solar licenses, any inclusion of an installment payment plan in the Retail Community Solar Tariff & License Agreement would have to uniformly apply to all EKPC Owner-Members.

EAST KENTUCKY POWER COOPERATIVE, INC. PSC CASE NO. 2016-00269

RESPONSE TO INFORMATION REQUEST

COMMISSION STAFF'S FIRST REQUEST FOR INFORMATION DATED 08/30/16

**REQUEST 7** 

**RESPONSIBLE PARTY:** 

David Crews

Refer to the Application at 11, which states that East Kentucky believes it

is critical to "pursue prudent diversification of the generation portfolio via increased integration

of viable renewable resources." Explain how the benefits of a renewable resource are obtained

should East Kentucky allow its members' end users to sell the Renewable Energy Certificates,

rather than retire them.

Response 7. Regardless of whether participating retail members elect to sell or retire

the solar renewable energy credits ("SREC"), EKPC gains experience and knowledge with

construction and operation of a solar facility. The experience and knowledge gained from this

project will directly strengthen EKPC's ability to effectively and economically develop and

operate solar renewable energy in the future as potential standards and regulations are adopted,

which would benefit the EKPC Owner-Members.

The EKPC Community Solar tariffs are designed to synthetically allow the

retail members to participate in a solar farm and receive the monetary and environmental benefits

from the production of renewable electricity. There are three potential value or revenue streams from solar generation today (i.e. - the value of the energy produced/the value of the capacity potential/the value of the SRECs and environmental attributes). There are markets for SRECs currently and while the value of the environmental attributes may take a different form as a result of the Clean Power Plan, EKPC expects the environmental attributes to have value for the foreseeable future. EKPC believes the value and the revenue of the SRECs/environmental attributes should accrue to the retail member that licensed the panel. A retail member that installs on-site renewables has a choice to monetize the SRECs they produce or retire them. While many of these small generators may lack the acumen to sell the SRECs directly into the REC market, they have the option. EKPC intentionally designed these tariffs to put participating retail members that license a panel in a similar situation to the retail members that install on-site renewables.

Retail members who desire to represent that they are using renewable energy at their residences or businesses should choose to retire the SRECs.

In both cases, the project and tariffs are designed to accommodate the retail member's wishes.

Should EKPC need SRECs to comply with the Clean Power Plan, EKPC could purchase these SRECs at the prevailing market price.

## EAST KENTUCKY POWER COOPERATIVE, INC. PSC CASE NO. 2016-00269 RESPONSE TO INFORMATION REQUEST

COMMISSION STAFF'S FIRST REQUEST FOR INFORMATION DATED 08/30/16 REQUEST 8

RESPONSIBLE PARTY:

**David Crews and Todd Bartling** 

Refer to the Direct Testimony of David Crews ("Crews Testimony"), page 8, which references National Renewables Cooperative Organization ("NRCO") as having issued an RFP in October 2015 on behalf of EKPC.

Request 8a. Explain whether EKPC's selection of NRCO to perform the work described in the Bartling Testimony was the result of an RFP process.

Response 8a. The selection of NRCO to perform the work described in the Bartling Testimony by EKPC was not the result of an RFP process.

Request 8b. If NRCO was not selected through an RFP process, explain how it was selected by EKPC.

Response 8b. NRCO is a nonprofit corporation organized as a cooperative. NRCO has 24 Owner/Members of which EKPC is one. The NRCO board is comprised of a representative and an alternate from each of the Owner/Members. The Owner/Members of NRCO recognized

a need for staff with specialized renewables expertise but could not justify staffing their

individual organizations with this expertise. The Owner/Members organized NRCO to

centralize staff and get a better utilization of specialized expertise and not burden their individual

organization with underutilized staff. NRCO was organized to assist its Owner/Members

through education, development of projects, or to purchase power from renewable energy

projects.

Request 8c. The Bartling Testimony at 4 states that NRCO has served as independent

procurement manager for electric cooperatives on more than 40 solar projects over the last five

years. Provide the number and names of any cooperatives for whom NRCO has worked that

EKPC contacted as part of its selection process.

Response 8c. As described above, EKPC is a Member/Owner of NCRO. Don Mosier

(COO) is EKPC's board member and David Crews (SVP Power Supply) is EKPC's alternate.

As a participant on the NRCO board, EKPC has reviewed all of NRCO's participation in PPAs

and development projects. Some examples are:

Southern Maryland Electric Cooperative

Hughesville, MD

Prairie Power Inc.

Springfield, IL

Old Dominion Electric Cooperative

Glen Allen, VA

Mid-Kansas Electric Cooperative Hays, KS

North Carolina Electric Membership Corporation Raleigh, NC

Request 8d. The Bartling Testimony at 4-5 states that EKPC formally retained NRCO in September of 2015, and that NRCO's EKPC project team consisted of four individuals. Provide NRCO's cost estimate for the work it was to perform for EKPC, the costs incurred to date, and the estimate of additional costs that may incurred.

Response 8d. The original cost estimate was \$340,000 to assist EKPC from project solicitation through commercial operations. EKPC has spent \$39,265.73 to date. Any additional costs will be based on time spent supporting EKPC in this case and in development of the project.

EAST KENTUCKY POWER COOPERATIVE, INC. PSC CASE NO. 2016-00269

RESPONSE TO INFORMATION REQUEST

COMMISSION STAFF'S FIRST REQUEST FOR INFORMATION DATED 08/30/16

**REQUEST 9** 

**RESPONSIBLE PARTY:** 

David Crews

**Request 9.** Refer to the Crews Testimony at 10 regarding the second market research

phase related to the solar project. The first phase is described as in-depth interviews with 49

residential consumer members of five EKPC member systems. Explain how the second phase,

which involved 837 residential consumers across 14 EKPC member systems, was conducted.

Response 9. The second phase of the research was a quantitative survey which built

upon the insights gained in phase one to assess the degree to which those views were widely

shared by a representative group of residential consumers serviced by EKPC's member

distribution cooperatives. The quantitative phase of the research used advanced multivariate

statistical analysis to identify and develop profiles of five distinct attitudinal segments of

consumers within EKPC's consumer population based upon their views regarding the range of

energy related issues explored in phase one. It also provided estimates as to the proportion of

EKPC's residential membership that falls into each of the five segments.

The quantitative phase was completed in two steps. The first step

consisted of recruiting an equal number of participants from each of EKPC's distribution

cooperatives' residential membership. The questionnaire took an average of 20-25 minutes to complete. A \$20 incentive was offered to consumers for finishing the survey to ensure that a representative cross-section of consumers completed it -not just those who were interested enough in the topic to spend twenty minutes on a survey. Offering incentives for survey completion is a widely used market research industry practice.

The second step consisted of sending the questionnaire out to the recruited participants and collecting their completed surveys. Respondents were given the option of completing the survey online or in paper form. A total of 631 consumers completed the questionnaire in paper form, while 206 filled out the online version. The 837 respondents were equally split across 14 of EKPC's distribution co-op territories. These responses were then weighted proportionally based upon the size of each co-op (number of members) to derive results projectable to EKPC's entire residential membership base. Multivariate analysis using a "K-Means" test was completed on the research data identifying five distinct segments including "Actively Green", "Conveniently Green", "Indifferent Techies", "Indifferent Analogues", and "Environmental Skeptics".

Page 1 of 1

## EAST KENTUCKY POWER COOPERATIVE, INC. PSC CASE NO. 2016-00269 RESPONSE TO INFORMATION REQUEST

### COMMISSION STAFF'S FIRST REQUEST FOR INFORMATION DATED 08/30/16 REQUEST 10

RESPONSIBLE PARTY: David Crews

Refer to the Crews Testimony at 9-13. Provide a copy of the NRECA Market Research Services study and its results.

Response 10. The NRECA Market Research Services study and its results are provided as Attachment 10-1.





### Renewable Energy and Energy Efficiency Study

EKPC DSM and RE Collaborative Meeting October 23, 2013

# ttachment 10-1

### Study Objectives

- Explore members' views on range of topics likely to impact their level of interest in various energy efficiency programs, including:
  - Perceptions of/satisfaction with their co-op
  - Degree to which they see energy situation as critical
  - Level of concern regarding environment
  - Impact of electricity bill on their monthly budget
  - Degree to which see room for improvement in keeping their energy use in check
  - Views on how cost of electricity is likely to change in future
  - Participation and interest in various energy efficiency programs and services
  - Attitudes toward technology

## Two Stages of Study

#### Qualitative Interviews with consumers exploring

- Awareness/familiarity
- Views
- Context

### 2. Quantitative Segmentation Survey

- Builds on insights gained in qualitative stage
- Statistically identifies and quantifies consumer segments
- Builds profile of each segment
- □ Programs most/least interesting to each
- Most compelling aspects of programs
- Tedia relied upon □ Media relied upon
- Identifies statements which are strong predictors of segment

### Quantitative Study Methodology

#### Phase I

- Random sample of each cooperative's members screened and recruited through short phone calls offering an incentive for their participation and asking them how they would prefer to complete questionnaire - mail or web-based survey.
- Those without high speed internet were sent survey by mail; those with high speed internet were given option of taking survey online.

#### Phase II

- The surveys are relatively lengthy, taking 20-30 minutes to complete. Once participant's completed questionnaire was received they were sent a gift certificate of \$20.
- 837 members from 14 co-ops completed questionnaires: 631 via mail and 206 online.
- Overall results are weighted to represent proportion of members served by each co-op.

## Market Segmentation Results

# Segments



Actively Green 17%



Environmental **Skeptics** 20%



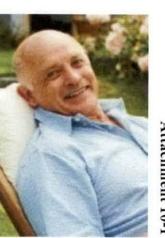
Conveniently Green 17%

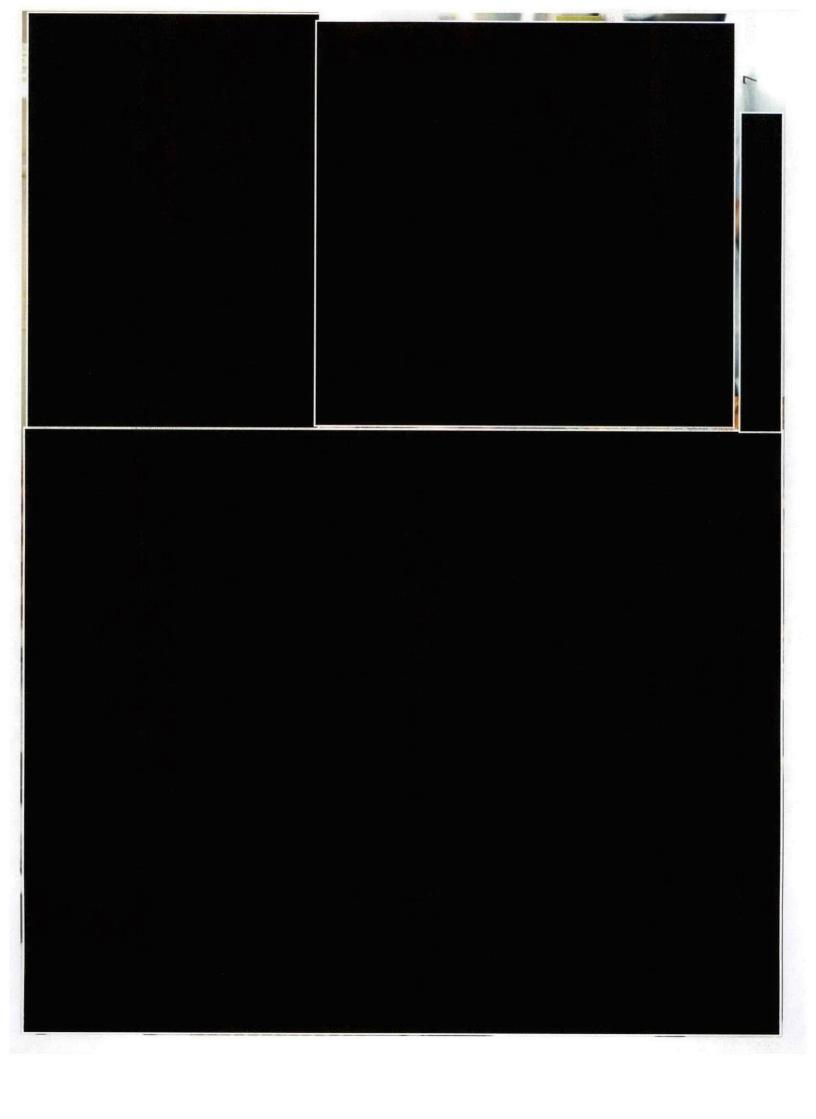


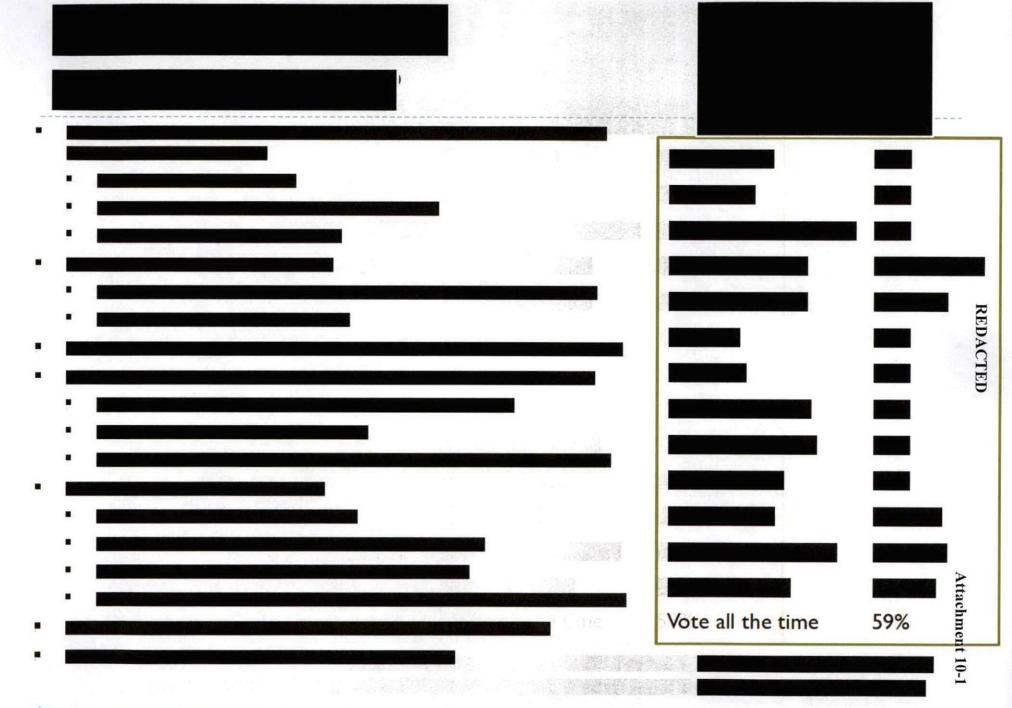
**Techies** 

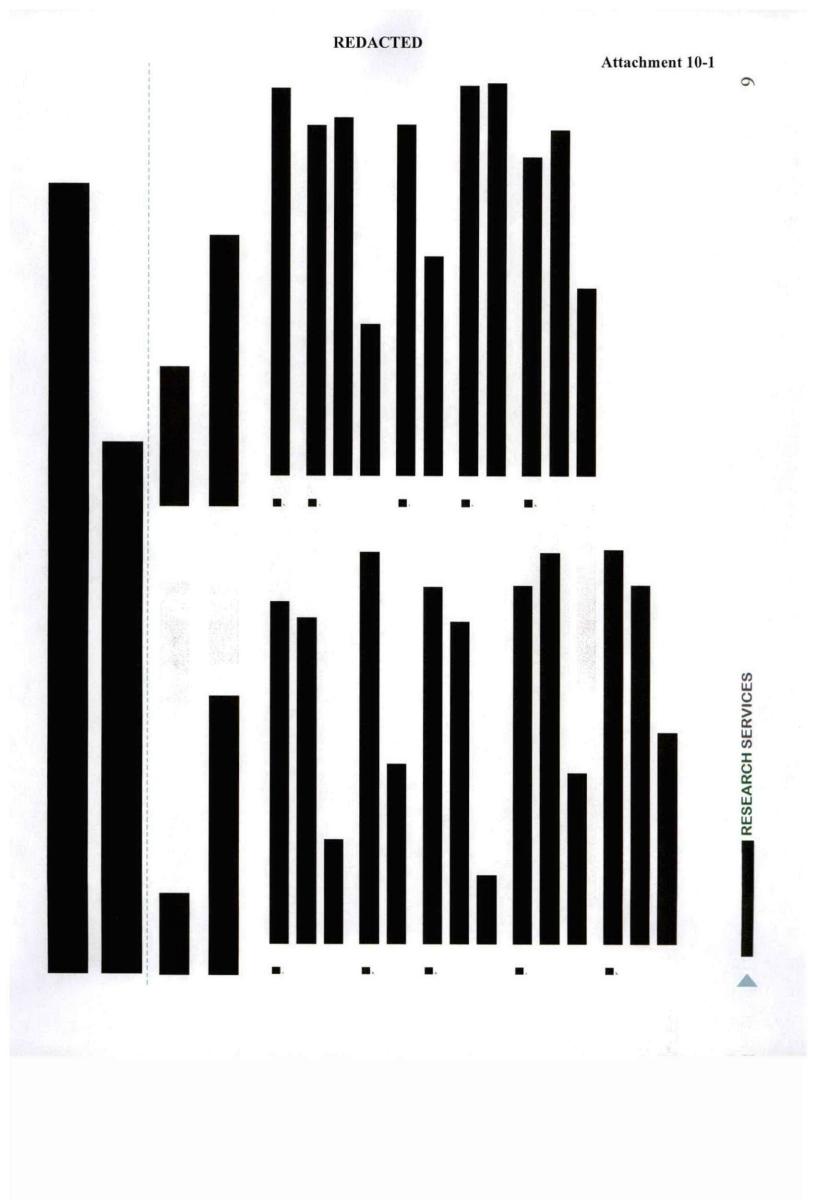


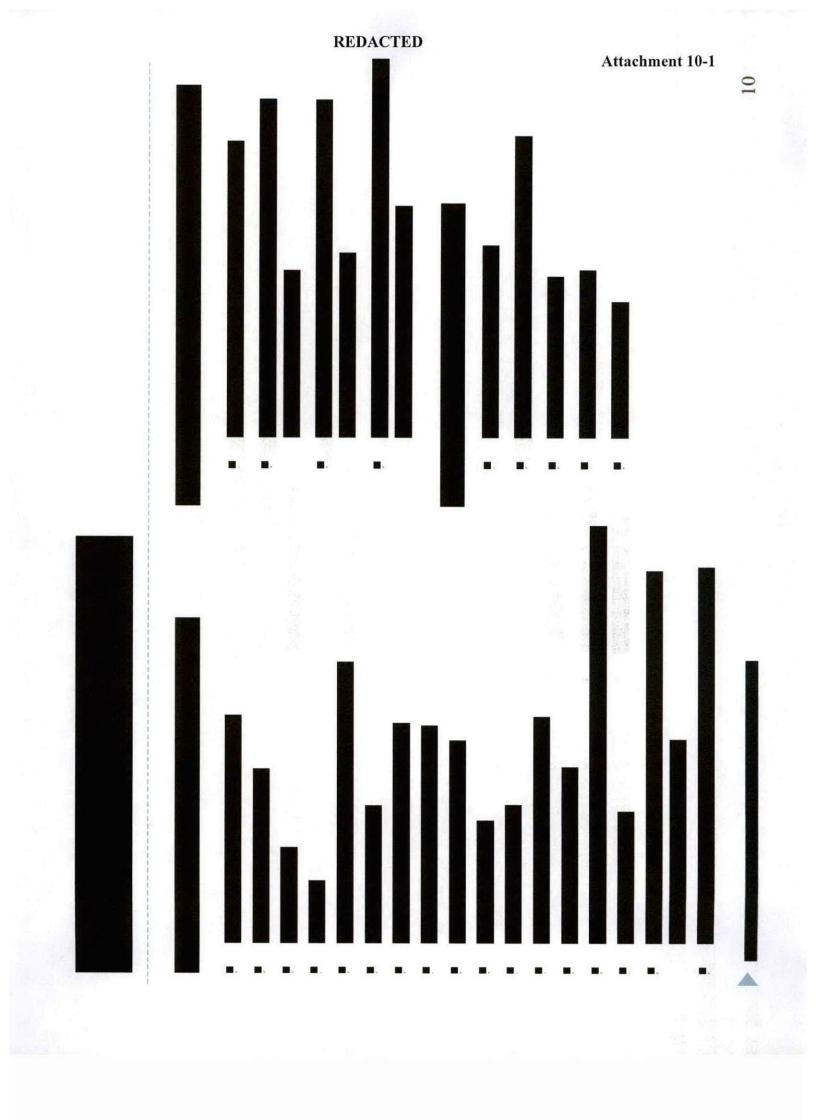
Indifferent Analogs 21%

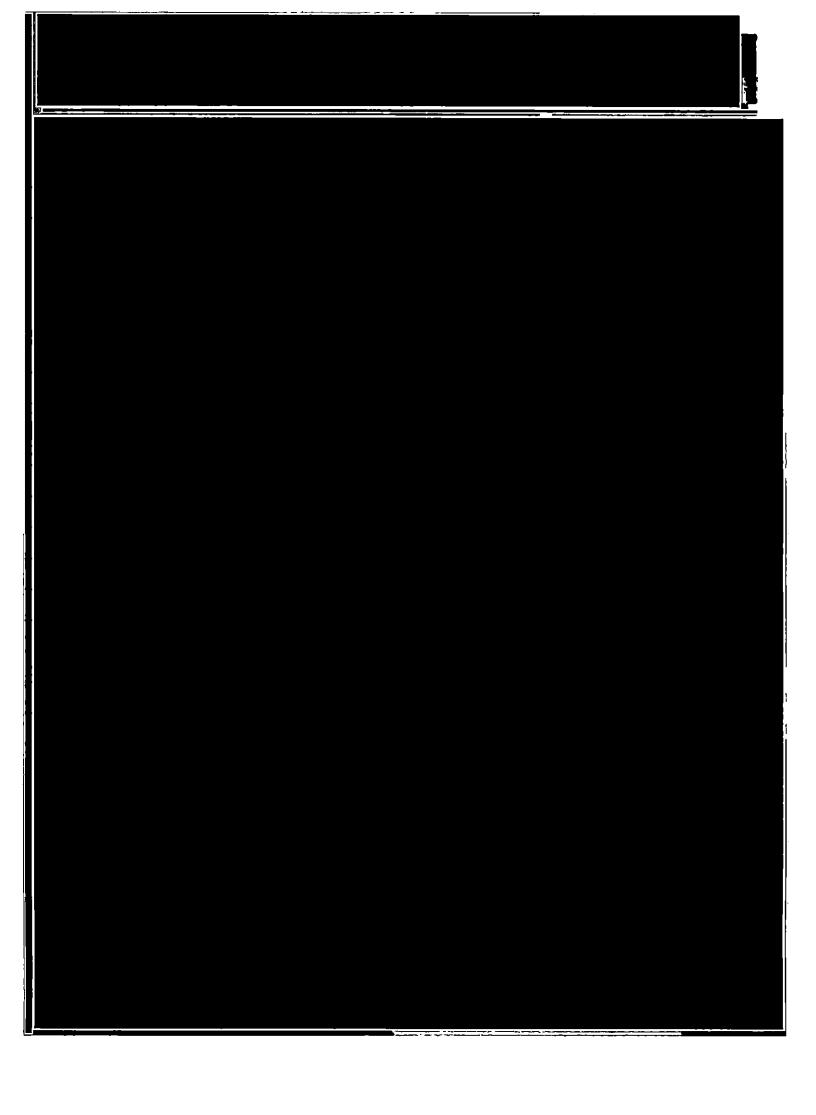


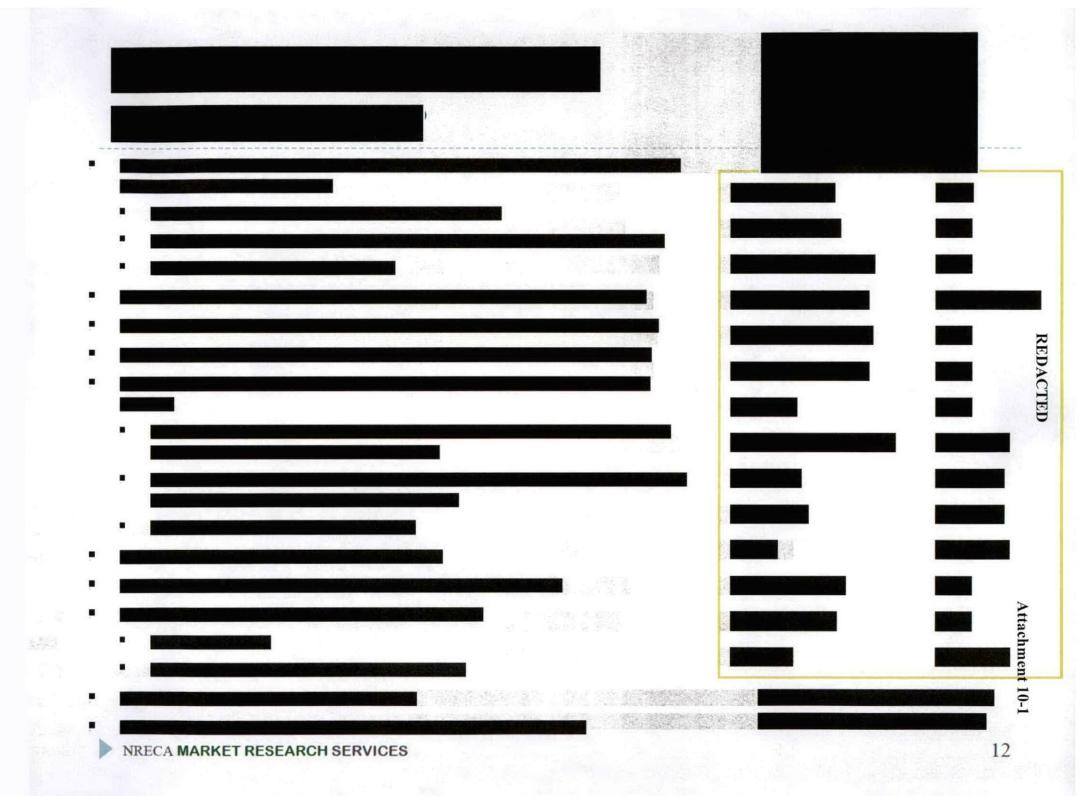


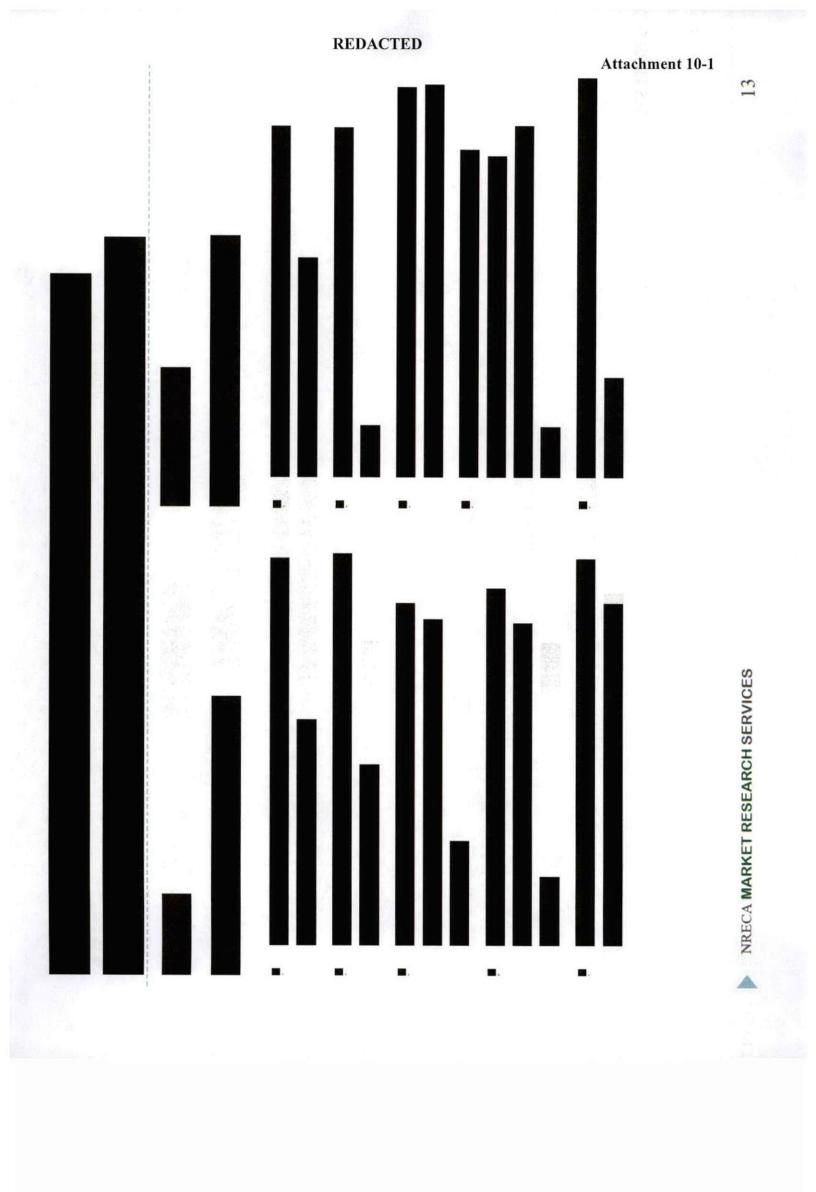


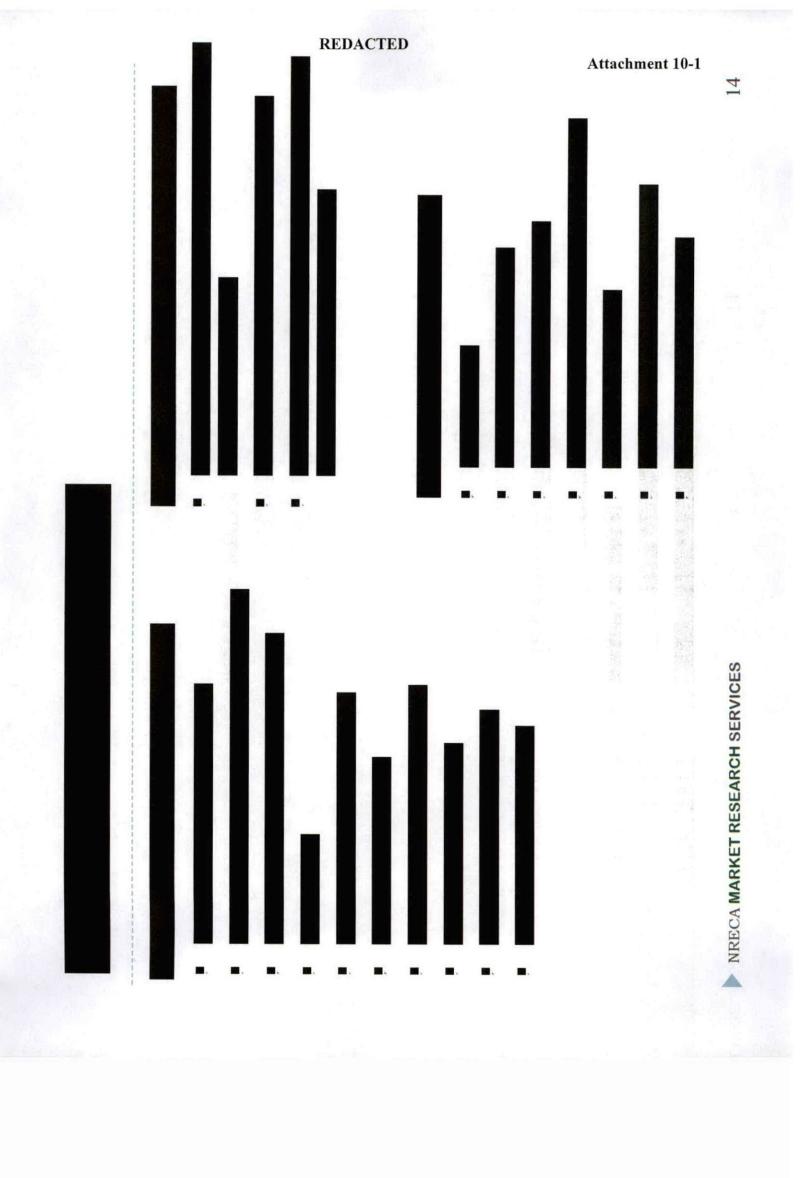


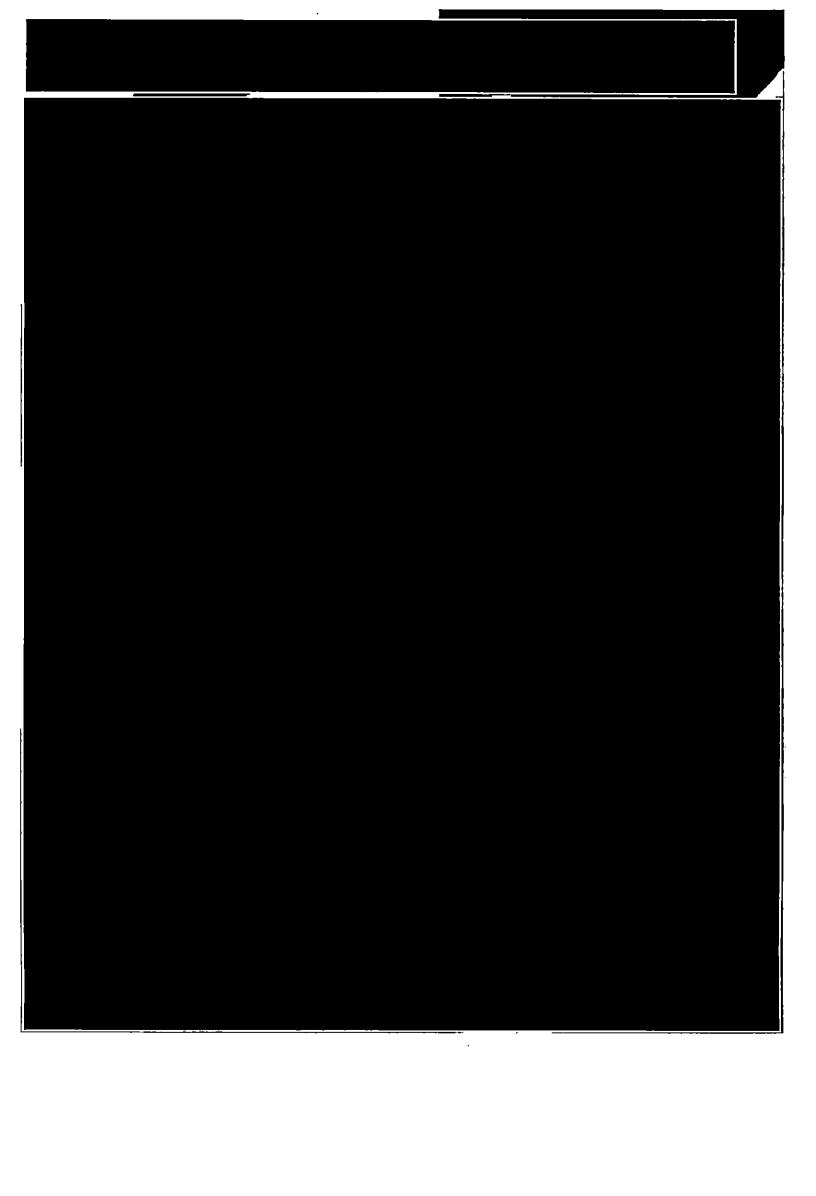


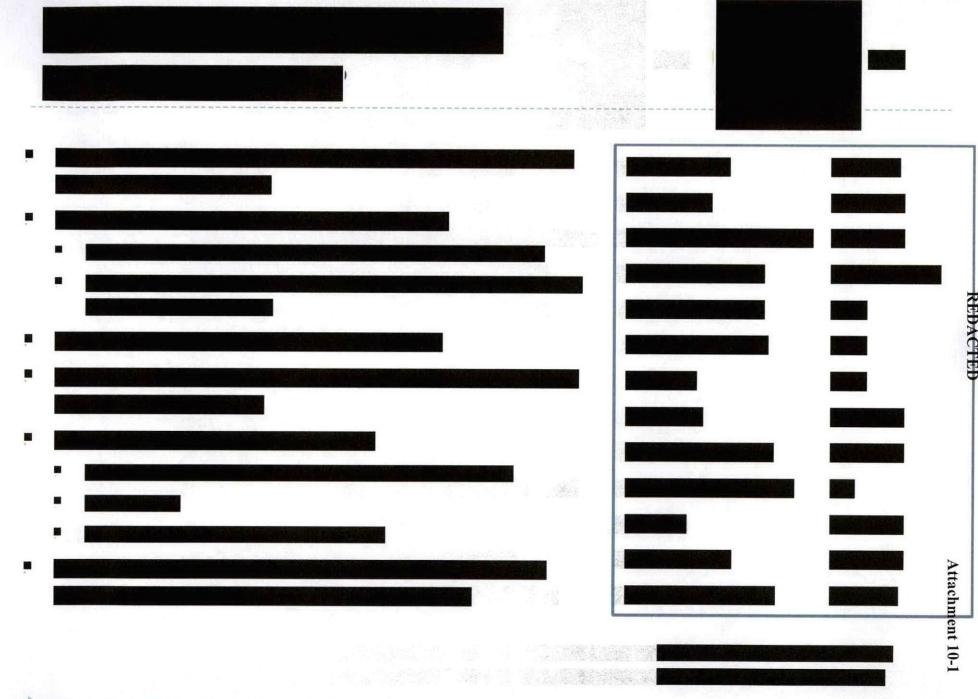


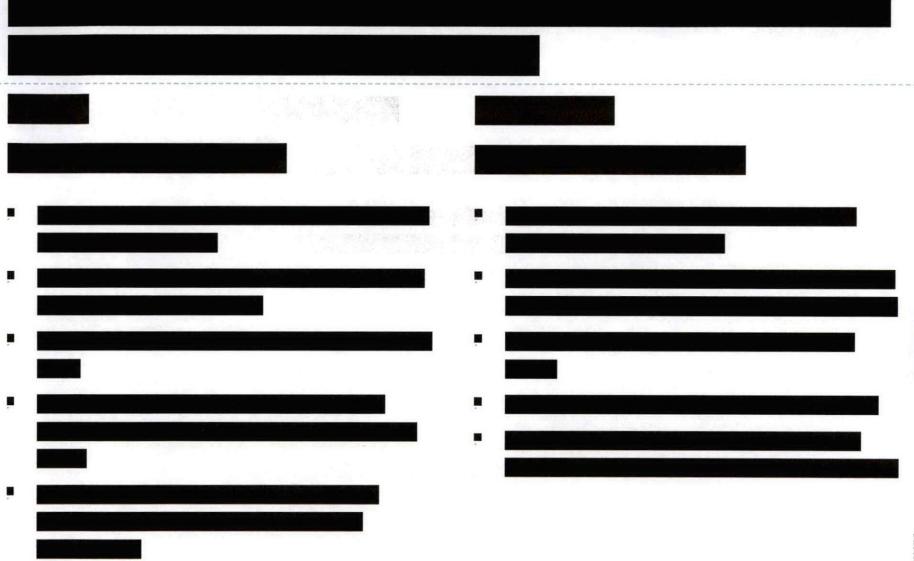








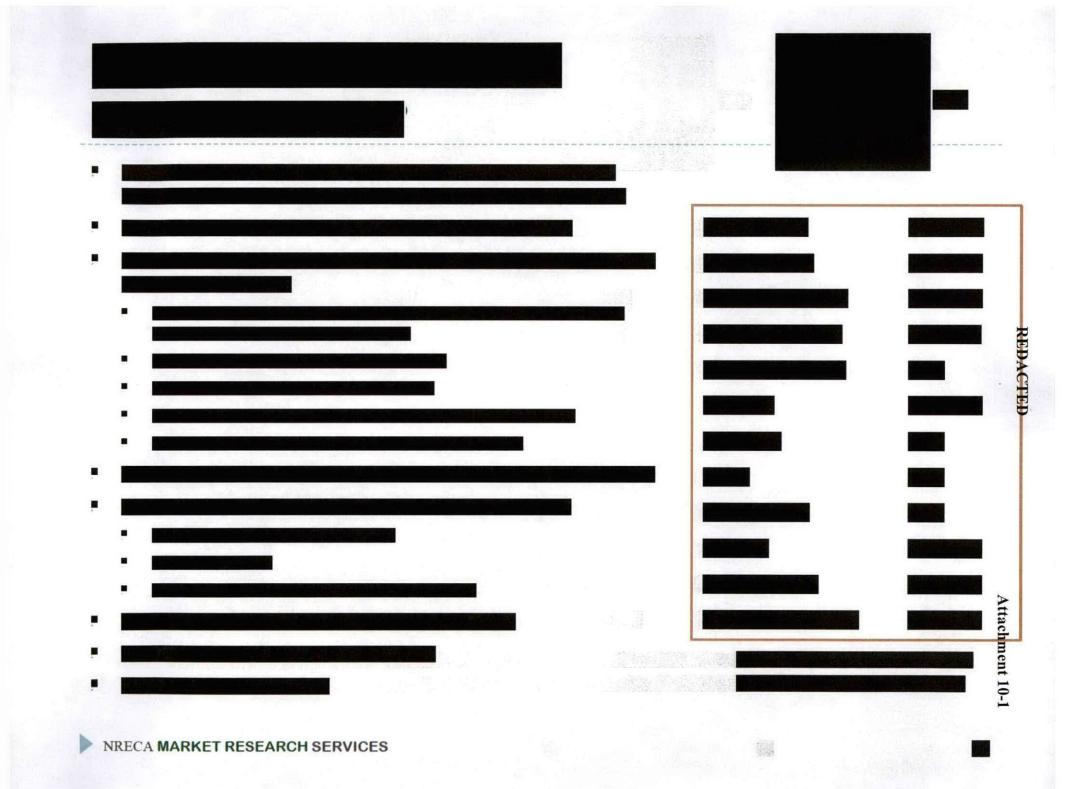


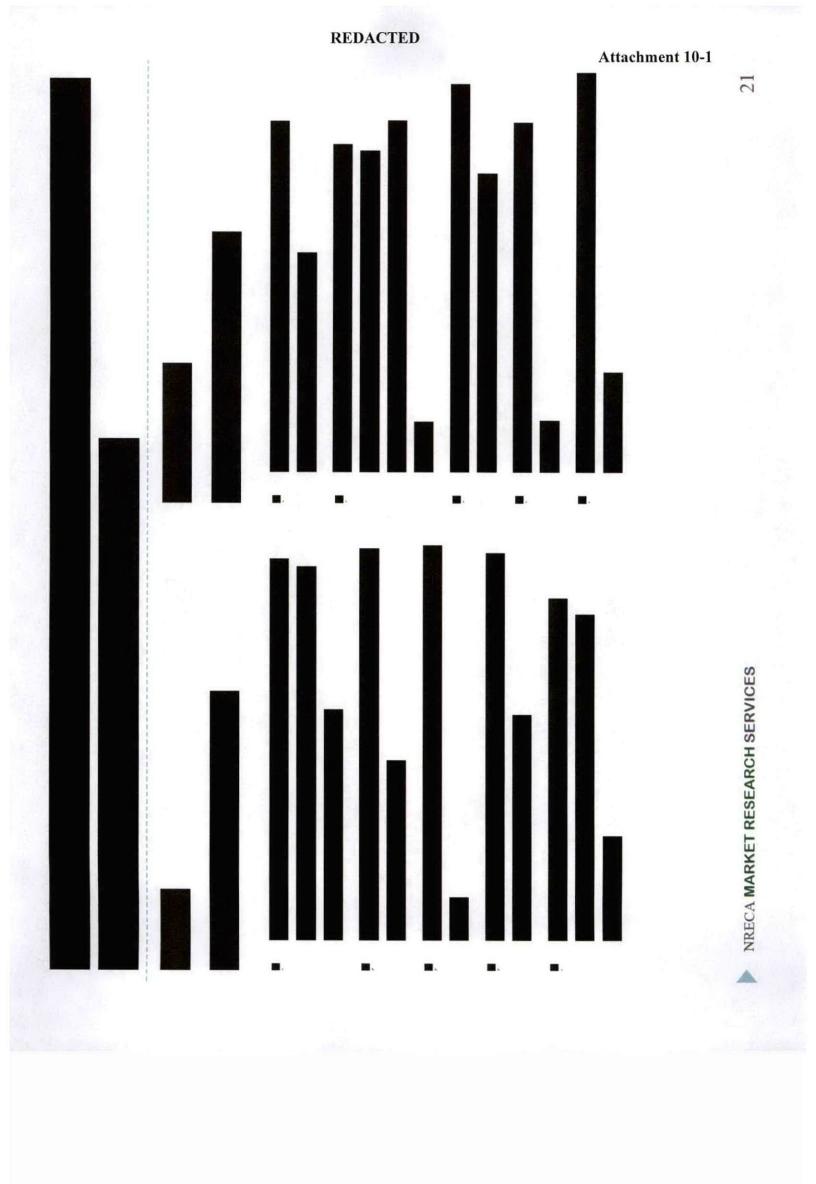


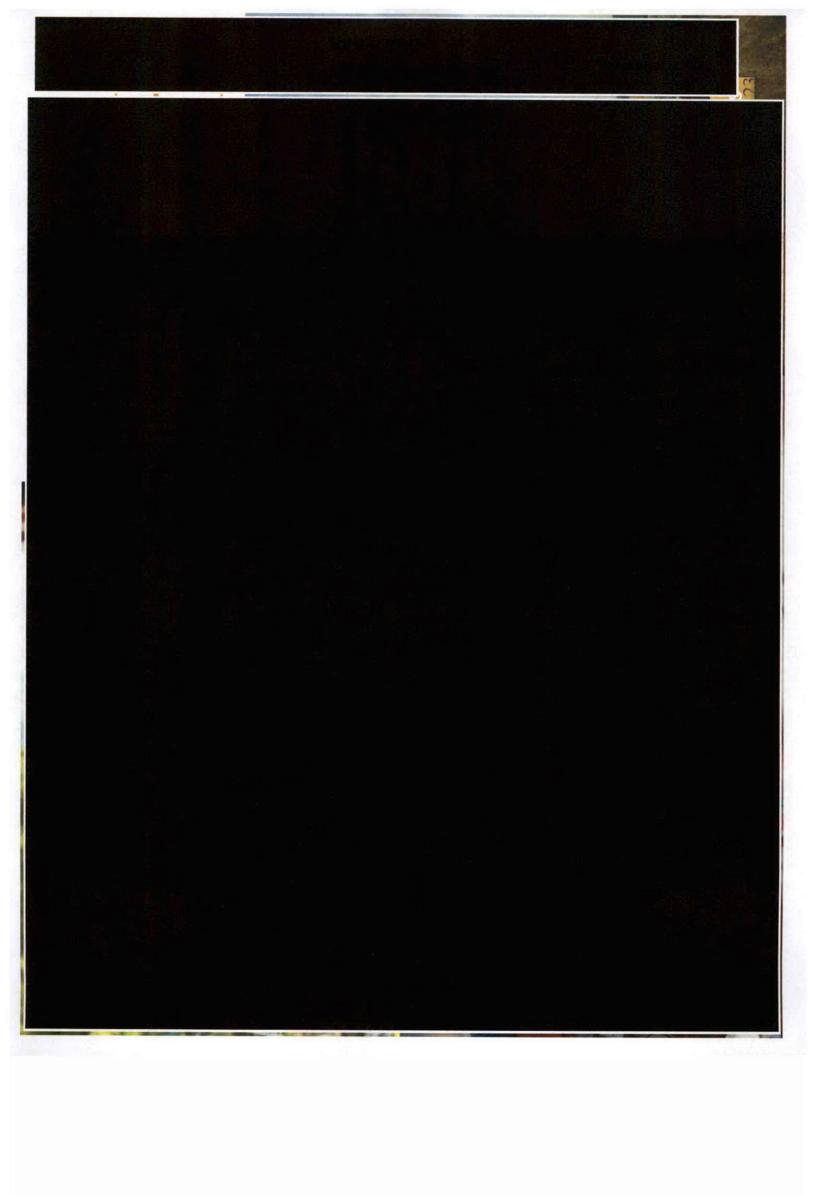




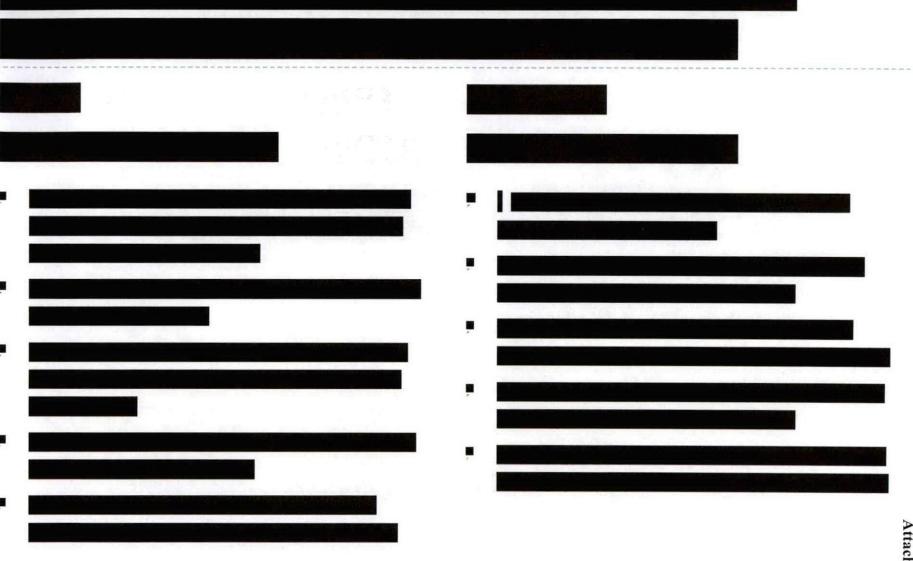


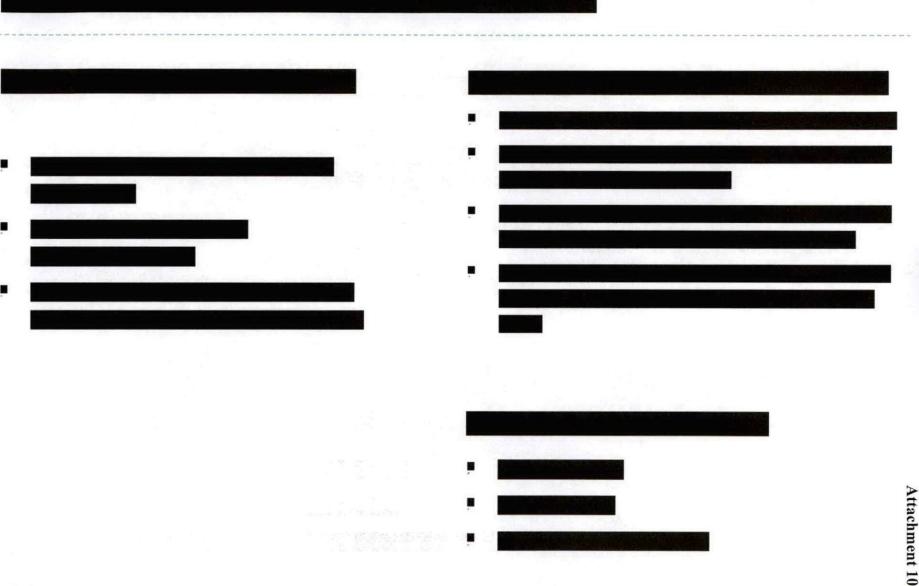


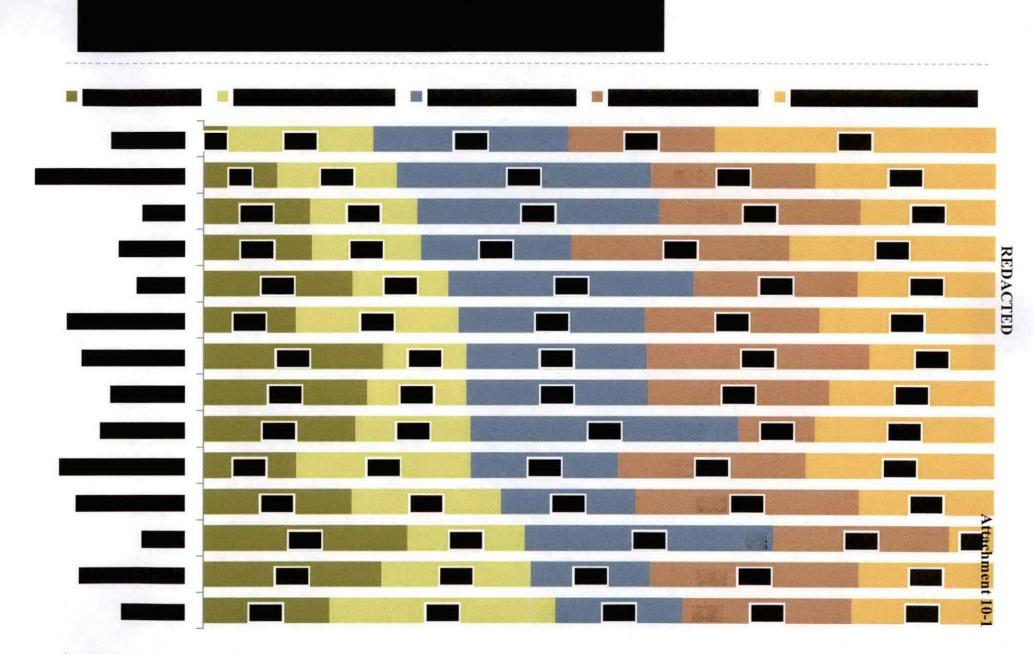


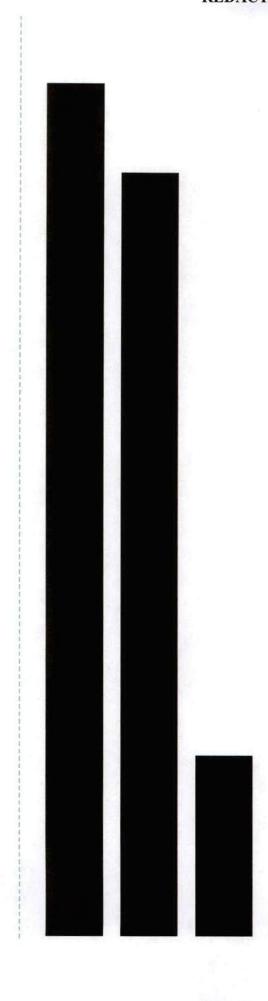


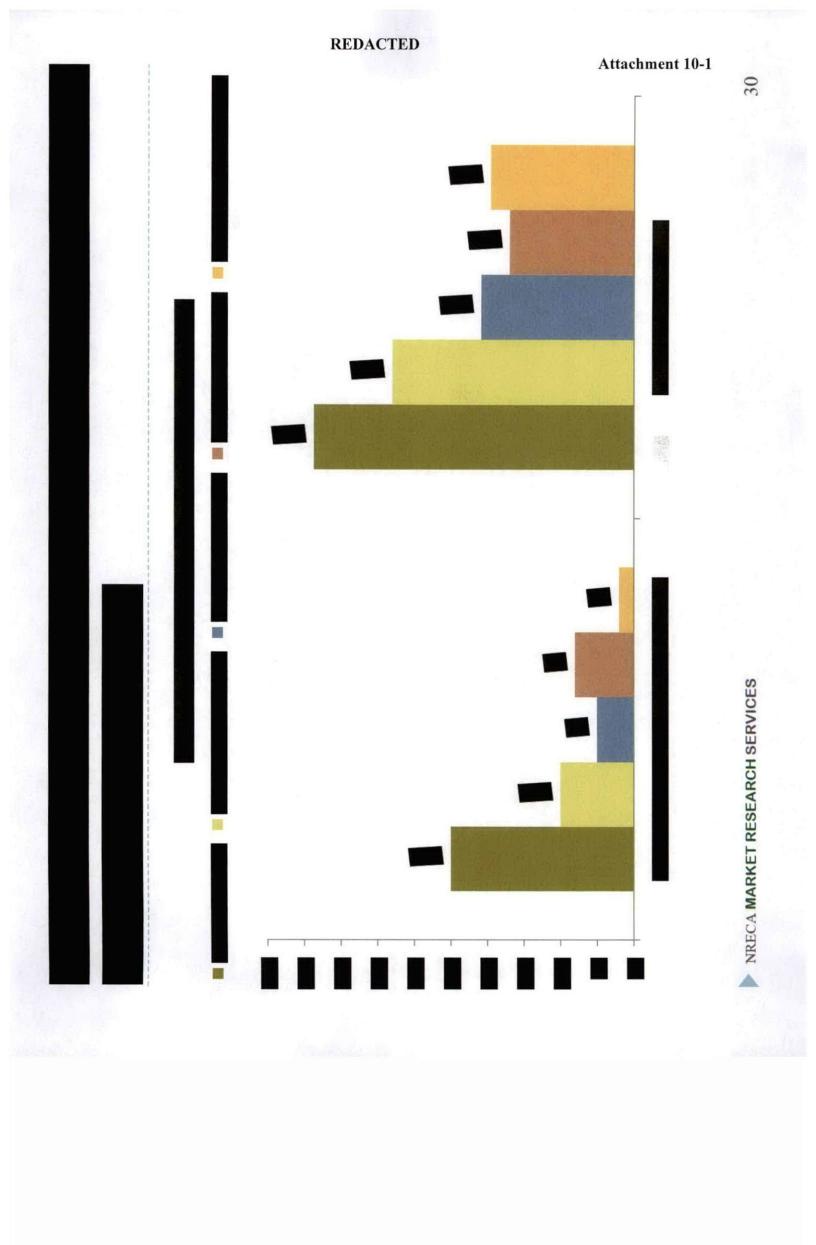




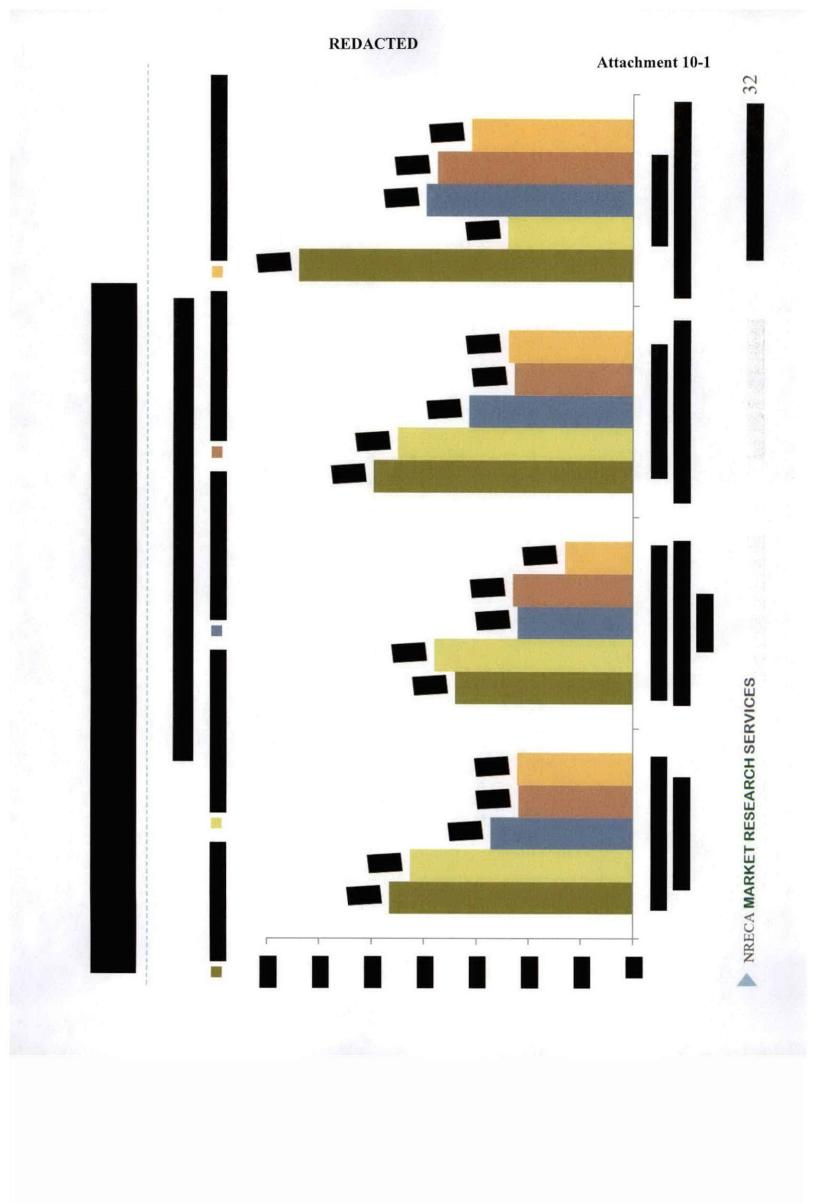


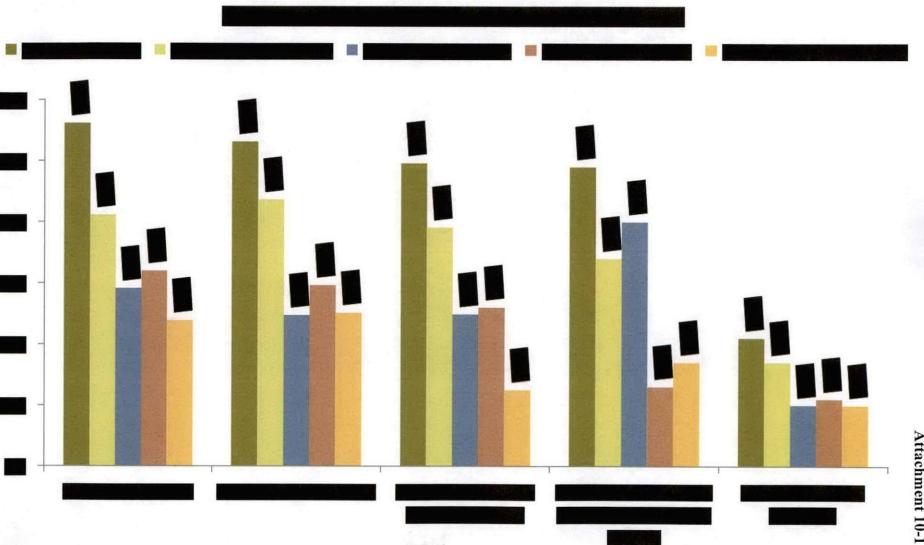




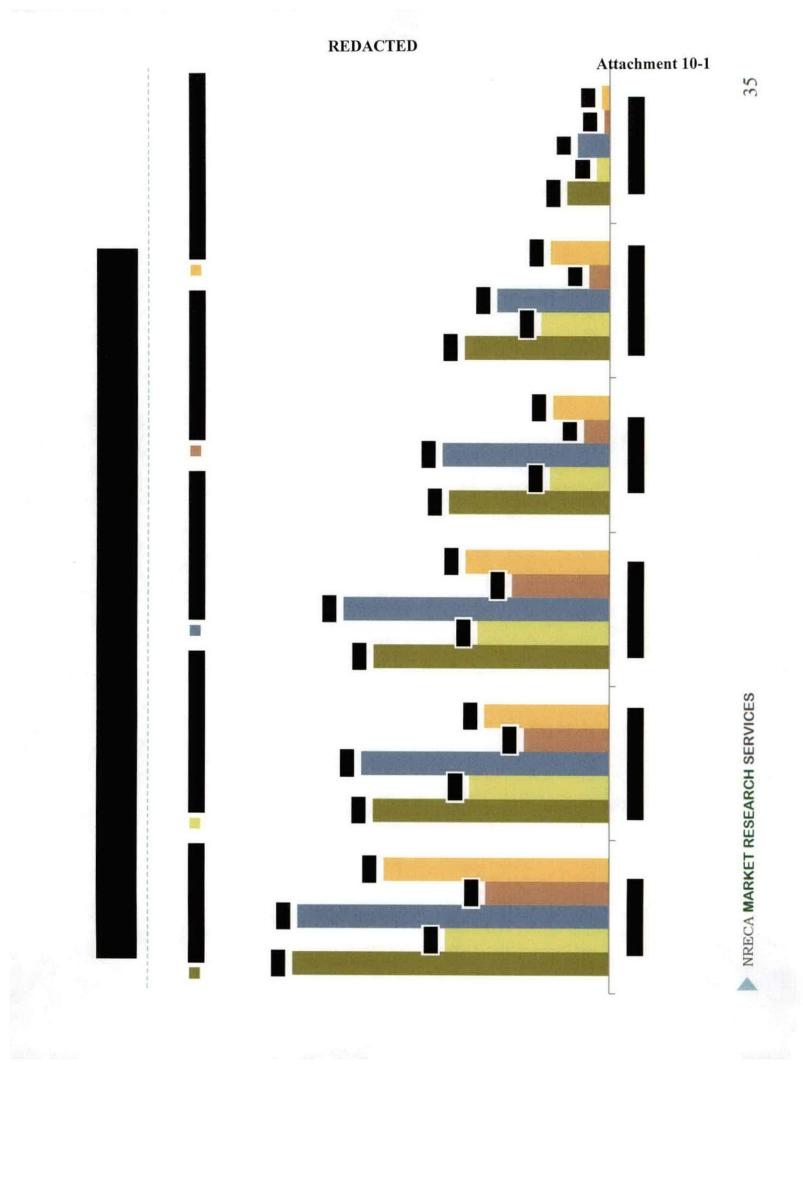


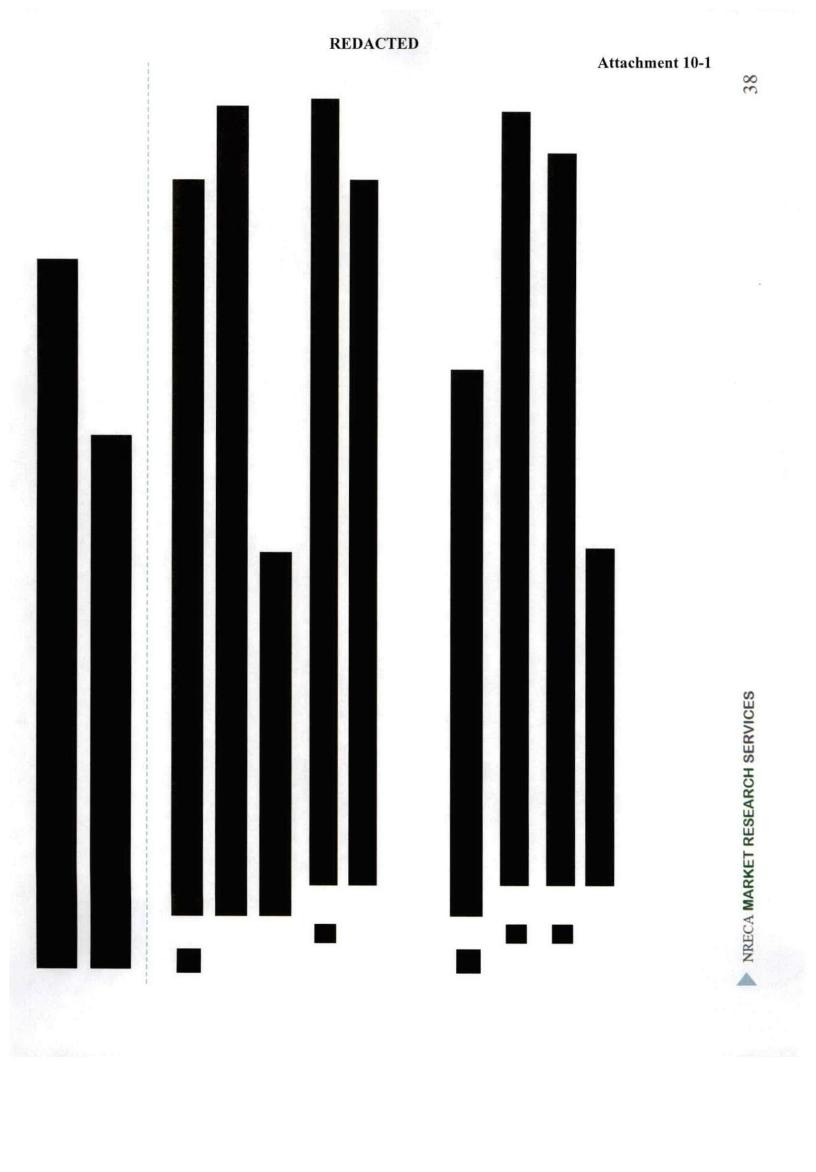


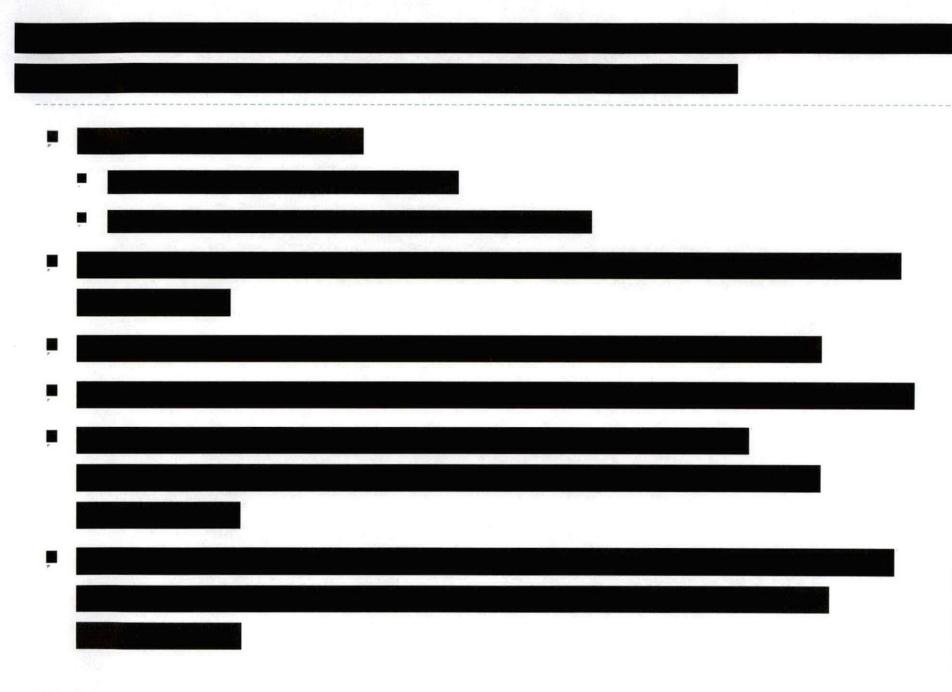




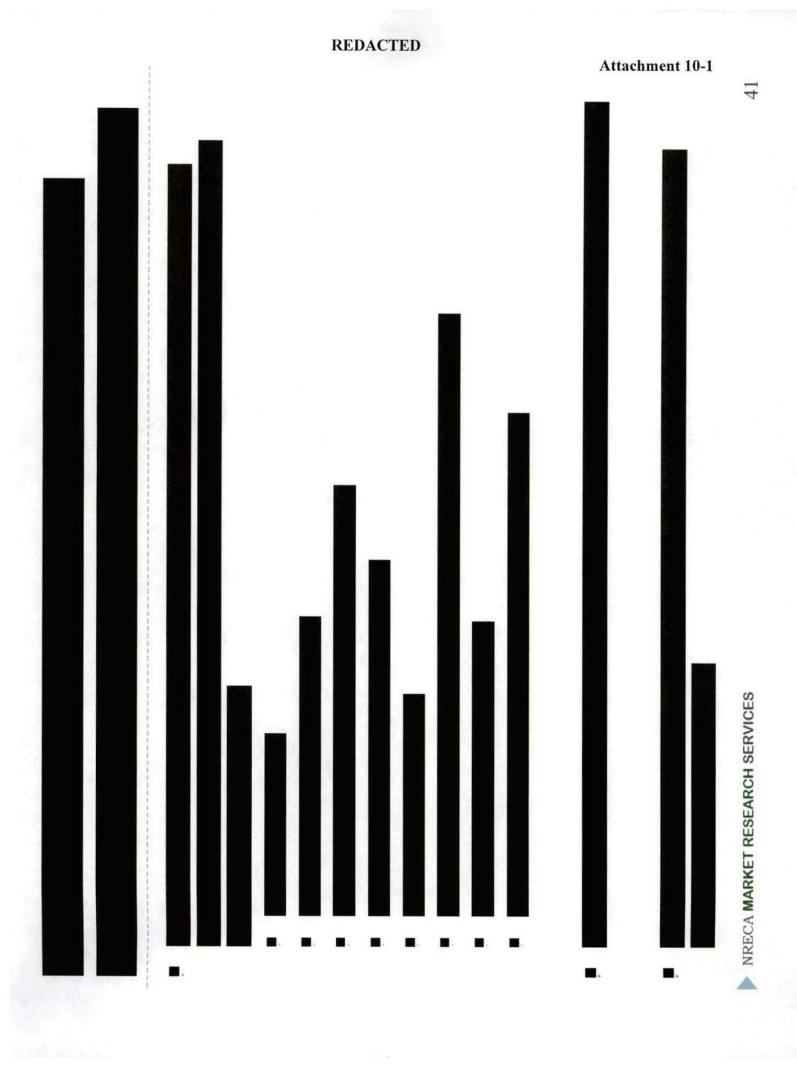


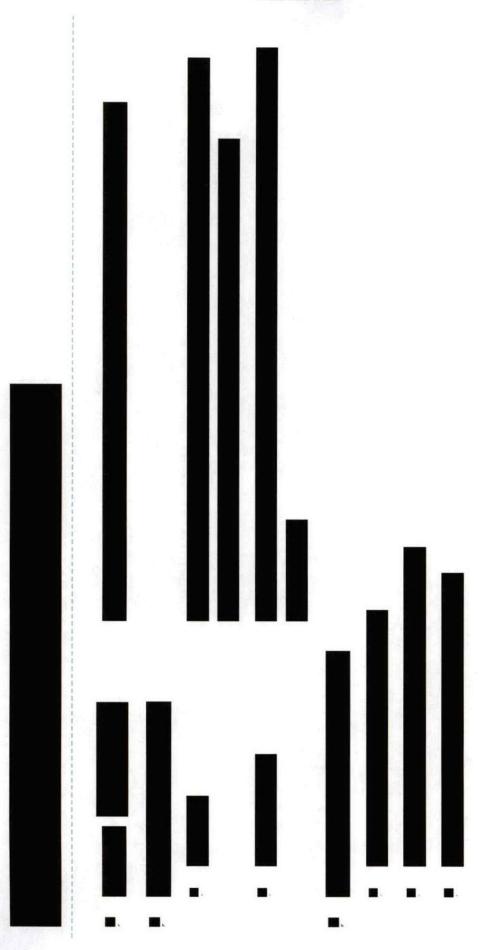










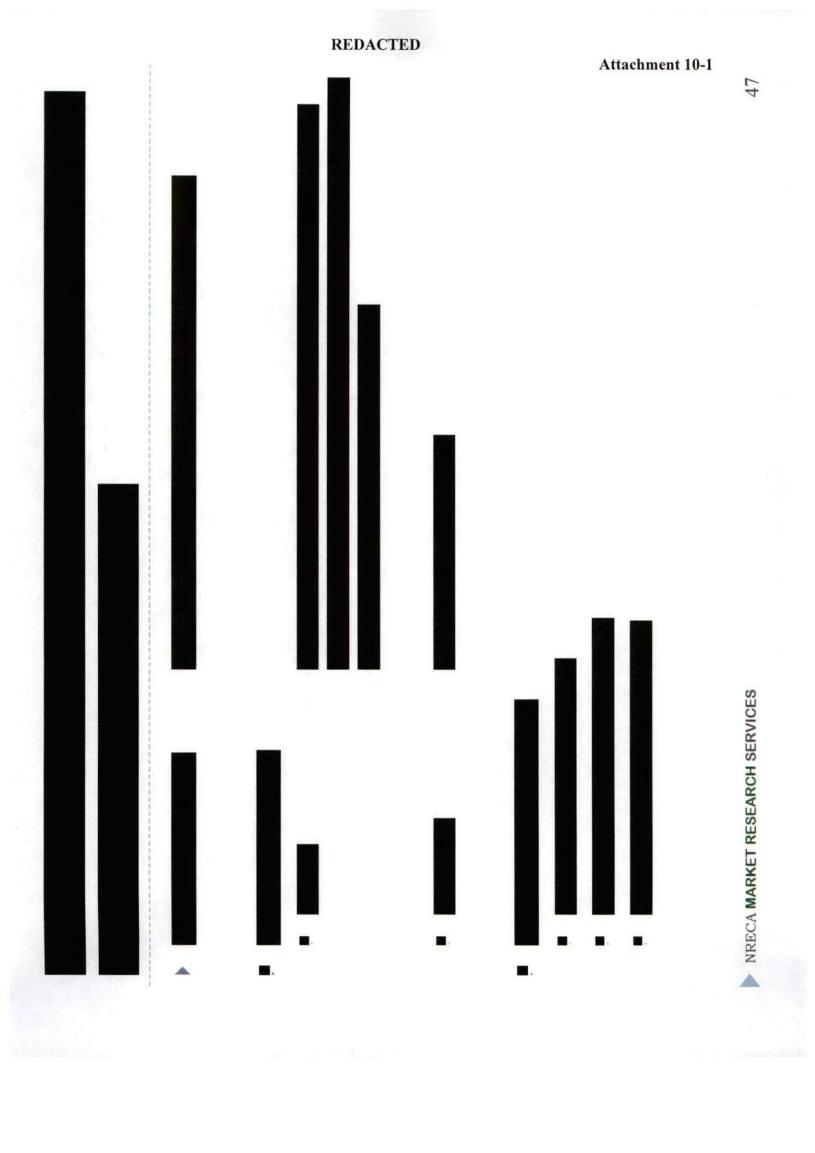


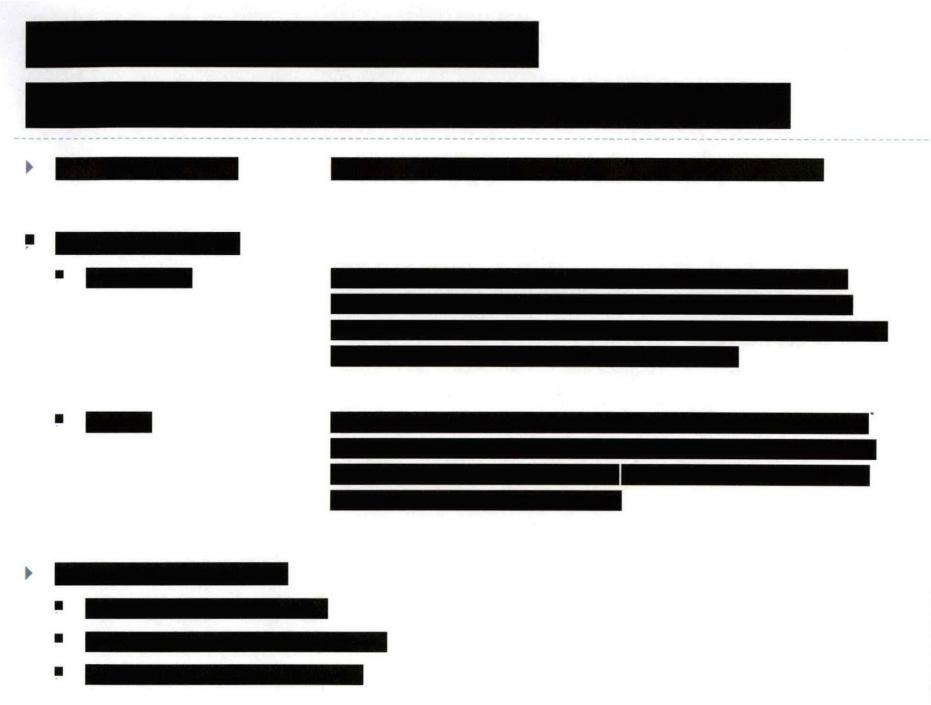


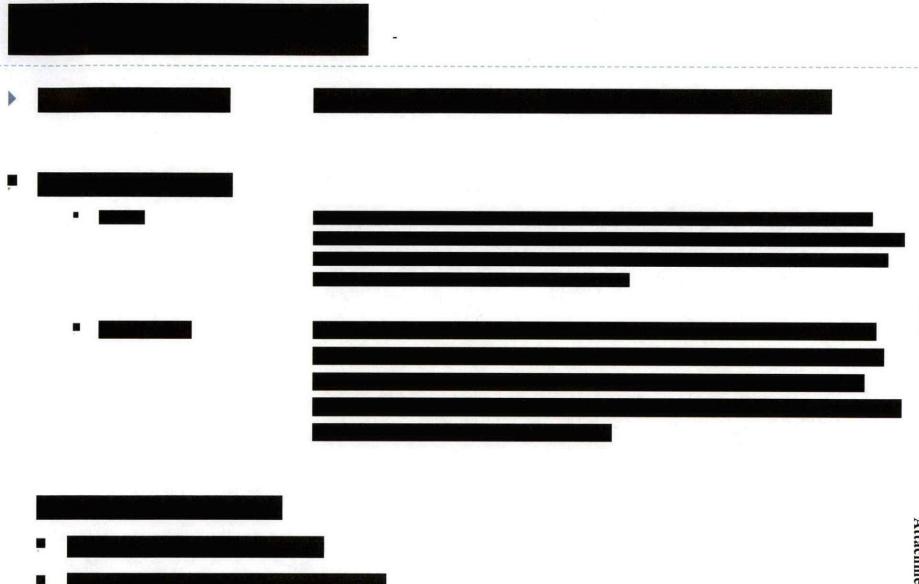








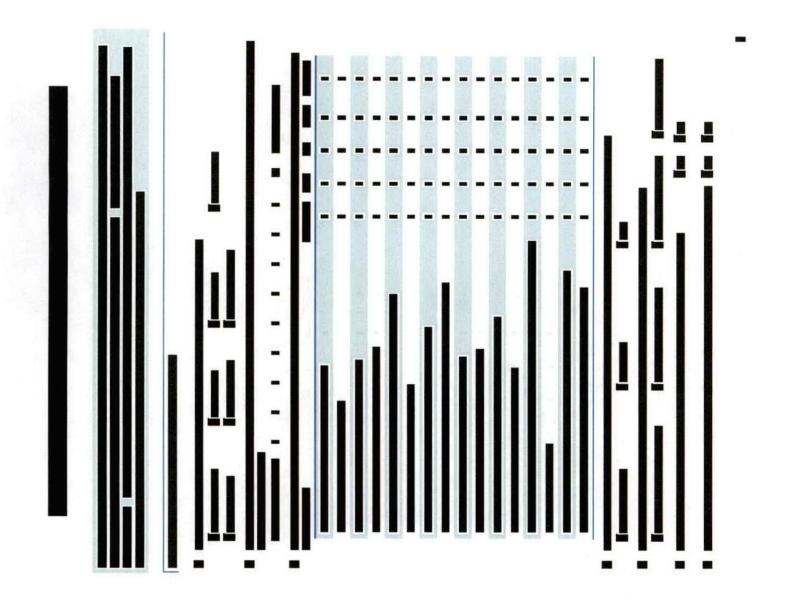


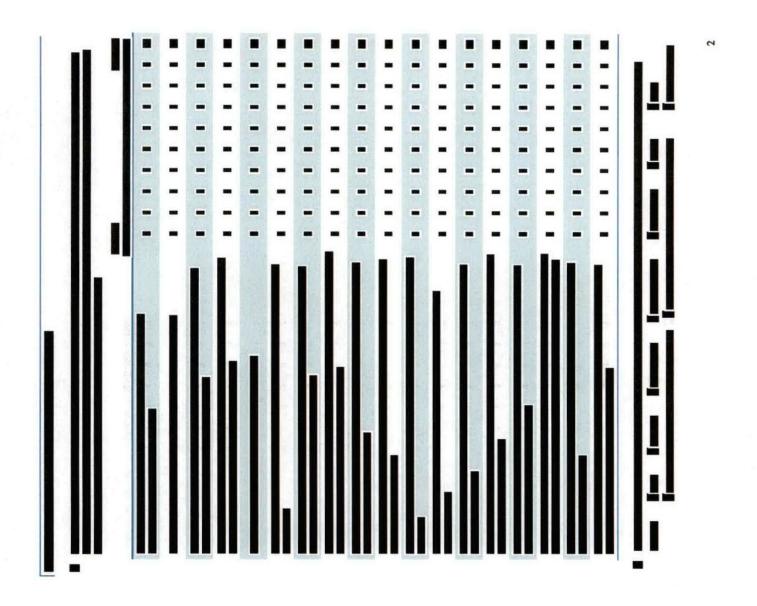




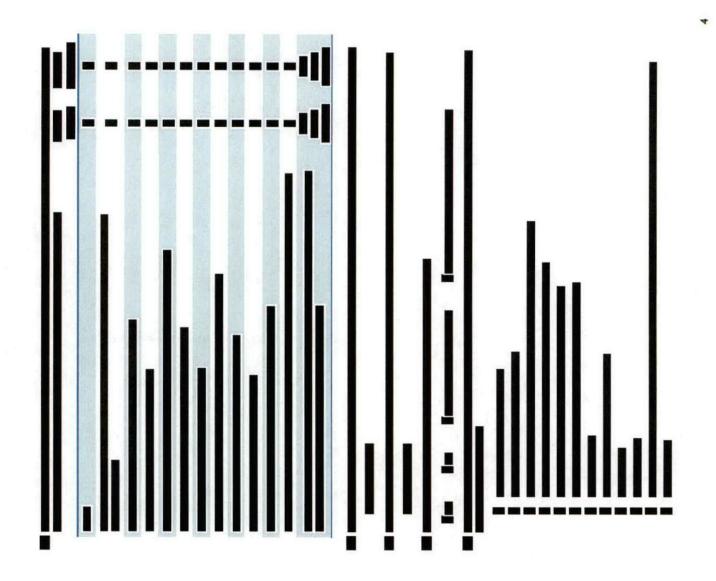


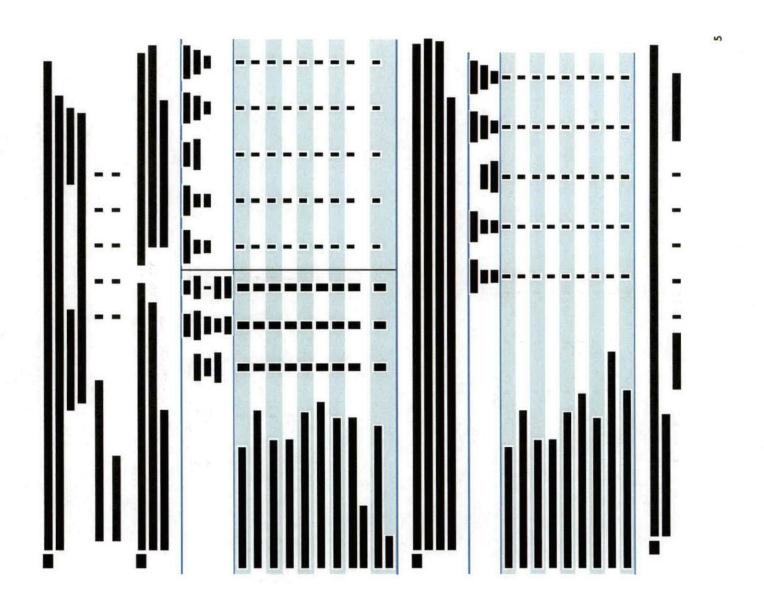


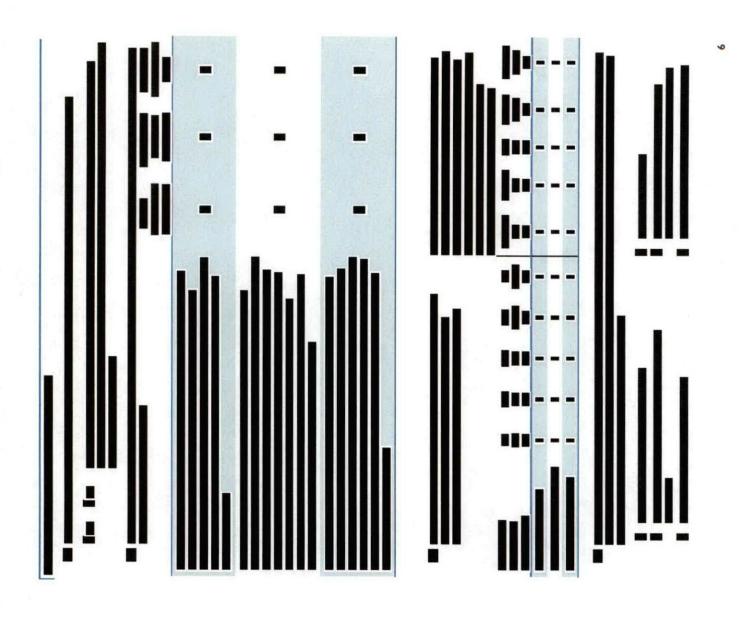


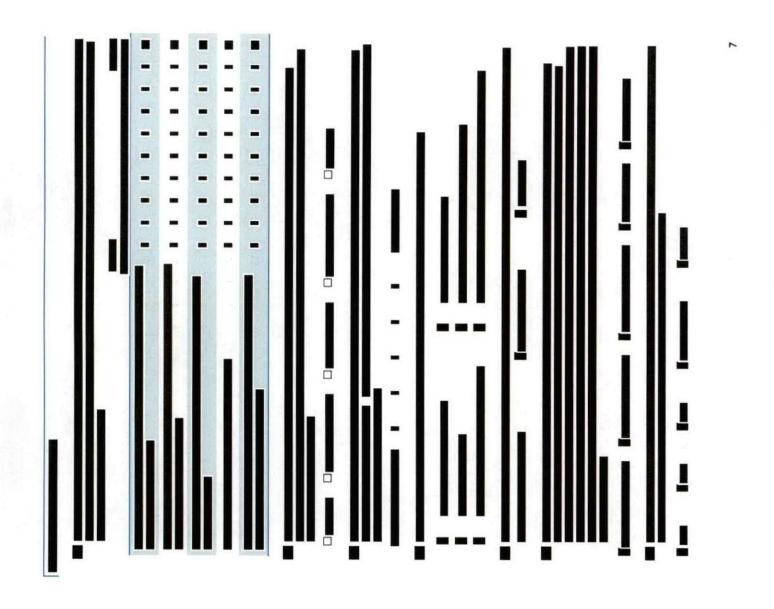


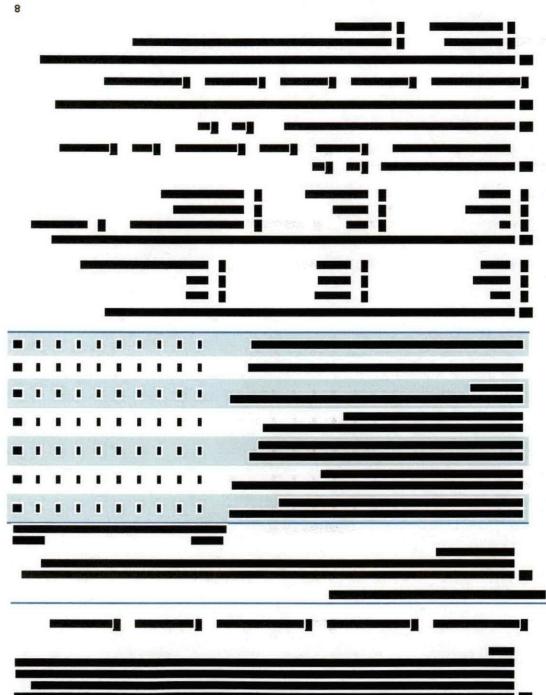




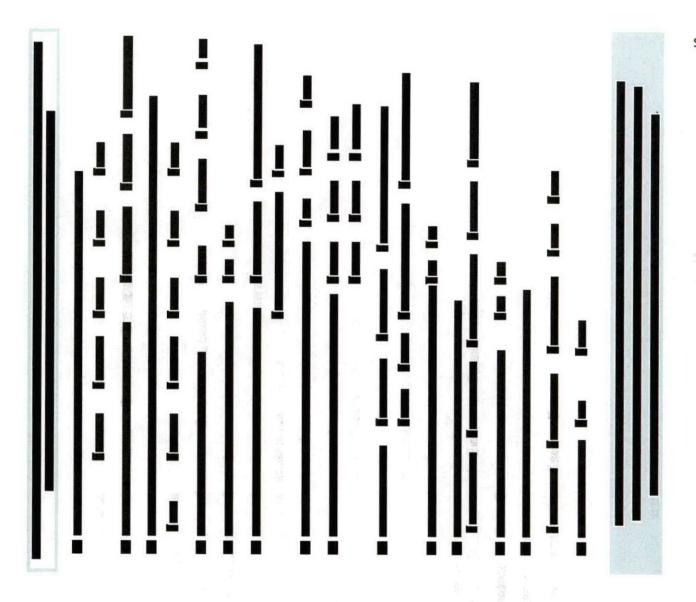












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COMMISSION STAFF'S FIRST REQUEST FOR INFORMATION DATED 08/30/16 REQUEST 11

RESPONSIBLE PARTY: David Crews

Refer to the Crews Testimony at 14-15.

Request 11a. Explain why EKPC has chosen to present customers with the option to either retire or monetize the value of the solar energy renewable credits associated with their accounts.

**Response 11a.** Please refer to EKPC's response to Request 7.

**Request 11b.** If a customer chooses to retire a solar energy renewable credit, provide clarification of what happens to the credit.

Response 11b. If a customer chooses to retire a solar energy renewable credit, then no other entity may buy the right to use that credit to either offset an emission or to claim credit for creating a renewable credit to meet a standard. A retired credit cannot be bought or sold or used by anyone else.

COMMISSION STAFF'S FIRST REQUEST FOR INFORMATION DATED 08/30/16

**REQUEST 12** 

**RESPONSIBLE PARTY:** 

**David Crews and Tom Stachnik** 

Refer to the Crew's testimony at 16-17 regarding the possibility that members will have to pay through base rates for any unlicensed portion of the proposed project which becomes an EKPC system resource. Also refer to the Direct Testimony of Tom Stachnik ("Stachnik Testimony"), page 8, which states that the proposed project was designed so that there would be minimal to no financial impact on EKPC members or non-participating retail customers. Provide any economic analysis performed by, or on behalf of, EKPC that supports its expectation that the proposed project will not have a discernible impact upon its Members' rates if any portion of the project is unsubscribed.

Response 12. If none of the panels were licensed, EKPC estimates the total annual cost of the solar project (interest, depreciation, O&M, etc.) would be about \$1 million per year. An estimate of the benefits (energy avoided cost, capacity market, and REC sales) is approximately \$700,000 per year, for a net cost of about \$300,000 per year. Dividing this by 12.5 million MWh gives about a \$0.025/MWh impact on cost to members, which is only a 0.04% increase in costs.

COMMISSION STAFF'S FIRST REQUEST FOR INFORMATION DATED 08/30/16 REQUEST 13

**RESPONSIBLE PARTY:** Darrin Adams

Refer to the Crews Testimony at 17-18 regarding construction of transmission assets, specifically, page 18, which states, "The EKPC Office Substation can be optimized through certain improvements and the Project provides a convenient opportunity for making these improvements. Substation improvements that are attributable to the Project will be assigned to the Project."

Request 13a. Confirm that the only transmission assets that will be constructed as part of the proposed project are the improvements to the EKPC Office Substation.

Response 13a. The following EKPC transmission/distribution facilities will be upgraded in conjunction with the solar Project:

• The EKPC Office 69-12.5 kV distribution substation. This substation will be rebuilt adjacent to the existing location to connect the solar Project into the EKPC system and to address existing maintenance and operational issues associated with the substation.

- The EKPC-owned 69 kV tap line connecting the EKPC Office, Treehaven, and Van Meter distribution substations to the LG&E/KU transmission system. Approximately 2600 feet of this tap line will be rebuilt in its present location for the following reasons:
  - o to connect the solar Project to the upgraded EKPC Office substation by adding the new 12.5 kV three-phase circuit from the solar Project location to the EKPC Office substation as an under-built circuit on this 69 kV tap line (approximately 1700 feet)
  - o to connect the tap line to the upgraded EKPC Office Substation in its new location (approximately 200 feet)
  - o to address the aged infrastructure and declining condition of the line (approximately 700 feet).
- The EKPC-owned 69 kV interconnection metering equipment adjacent to the EKPC Office substation. This metering equipment will be upgraded from single-directional measurement to bi-directional measurement capability, since the solar Project will result in power flows from the EKPC facilities onto the LG&E/KU system at certain times.

Request 13b. Explain whether any improvements to the EKPC Office Substation are necessary even without the proposed project. If so, describe the improvements and why they are necessary.

Response 13b. Improvements to the EKPC Office substation are necessary even without the proposed Project. This substation was originally constructed in 1970 and still contains a significant amount of the originally installed equipment (transformers, structure, switches, and insulators). The condition of this equipment is of concern. Other desired improvements have also been identified that will drive the need for upgrades to the substation regardless of the solar Project. These improvements include enlarging the extremely small substation footprint, updating the oil-containment system, improving the grounding system, and adding bypass capability for substation equipment. EKPC intends to build a new substation adjacent to the existing substation. The new substation will be built to EKPC's present standards to ensure that it can be operated and maintained efficiently and reliably. The existing substation will be retired and removed once the new substation is completed and placed in service.

Similarly, the 69 kV tap line to the EKPC Office substation was constructed in 1970 and still includes the original equipment (poles, conductors, and switches). Several of the line's poles are in poor condition and need to be replaced. Modifications of the tap line will be required to accommodate the connection of the solar Project to the EKPC Office substation, the substation rebuild, and the replacement of the metering equipment. In order to implement these modifications, a temporary tap line will be required to avoid interruptions to service for the EKPC Office substation as well as the Treehaven and Van Meter distribution substations also served through this tap line. EKPC is capitalizing on the opportunity to additionally replace a switch structure, two poles, and 700 feet of conductor to address

equipment condition concerns associated with the line while the temporary line is in place to avoid the need for customer interruptions during the work.

Request 13c. Explain how improvements to the EKPC Office Substation that are not attributable to the proposed project will be accounted for.

Response 13c. EKPC has identified the projected costs for the improvements that are required to connect the Project to the EKPC system and the projected costs for the elective improvements that EKPC is choosing to make in conjunction with the implementation of the Project. The required costs have been included in the estimated total cost of the solar Project. The elective costs have not been included in this total project cost and are therefore not included in the panel licensing fee.

EKPC intends to set up two separate accounts to track actual costs for the substation and line improvements. One account will track costs for the improvements necessary to connect the solar Project. The other account will track costs for the elective improvements that EKPC is choosing to make in association with this Project.

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COMMISSION STAFF'S FIRST REQUEST FOR INFORMATION DATED 08/30/16 REQUEST 14

RESPONSIBLE PARTY: Darrin Adams

Refer to the Crews Testimony at 18 regarding the two processes initiated by EKPC "[b]ecause a portion of the energy generated by the Project will flow onto the KU transmission system . . . " The first process involves studies which have been started by the Louisville Gas and Electric Company and Kentucky Utilities Company ("LG&E/KU") Independent Transmission Organization ("ITO") in connection with the Small Generator Interconnection Request process. (Emphasis added)

Request 14a. Confirm that the completed study for the transmission service request cited at the bottom of page 18 refers to the same studies referenced earlier on the same page as part of the Small Generator Interconnection Request process that had been started by the ITO.

- (1) If this cannot be confirmed, explain why.
- (2) If the studies in question have not been completed, provide the date by which they are expected to be completed.
- (3) If the study referenced at the bottom of page 18 is something other than the studies in question, identify the study that has been completed.

Response 14a. At the time of EKPC's submittal of its Application for Issuance of a Certificate of Public Convenience and Necessity to the Commission, only one of the two transmission studies required had been completed. The completed study was the second study mentioned on page 18 of Mr. Crews' Testimony, which was the study to secure transmission service for the Project by designating the Project as a Designated Network Resource for EKPC load delivery points on the LG&E/KU transmission system. The study for interconnection of the Project to the LG&E/KU transmission system (referred to as the Small Generator Interconnection Request process) was not yet completed at that time. However, that study has since been completed, and the ITO found no detrimental impacts caused by the Project on the LG&E/KU system. Therefore, all required transmission studies have been completed and no constraints were identified that would limit or prevent EKPC's operation of the solar facility.

Request 14b. Starting at the bottom of page 18 and continuing on page 19, the testimony states that the ITO has indicated to EKPC that no limitations were identified that would preclude granting the requested service.

- (1) Explain how this indication was communicated to EKPC by the ITO.
- (2) Provide any report, letter, e-mail, or other communication of this indication from the ITO to EKPC.

Response 14b. The initial indication that no limitations were identified that would preclude granting the requested service was provided through telephone conversations between TranServ International personnel and EKPC personnel discussing the study results. Official email correspondence was provided to EKPC from TranServ International on July 22, 2016, stating that the ITO had approved service for the transmission service request ("TSR") for the solar Project. This e-mail correspondence is provided as Attachment 14-1. The System Impact Study report provided by the ITO for this study request is provided as Attachment 14-2.

E-mail correspondence was provided to EKPC from TranServ International on August 4, 2016, stating that the ITO had completed the System Impact Study ("SIS") for EKPC's Small Generator Interconnection Process ("SGIP") request and indicating where EKPC could access the report. The Conclusion section (Section 1.5) on page 6 of this report states "[n]o thermal, voltage, short circuit or stability constraints due to the subject request were found. No generator owner, interconnection, network, or distribution facilities have been identified for this request, thus no cost estimate is provided and no Facility Study will be performed." The e-mail correspondence indicating completion of the SIS for EKPC's SGIP request is provided as Attachment 14-3. The SIS report for this SGIP request is provided as Attachment 14-4.

From: Support TranSery
To: Darrin Adams; Amanda Stacy
Cc: Subject: Date: Friday, July 22, 2016 12:53:46 PM image002.png

Mr. Adams,

Please let us know if you have any questions. Thanks.

#### **TranServ Support**

Support Phone: 763.205.7099

Fax: 763.201.5333

Support Email: support@transervinternational.net

TranServ International, Inc.

3660 Technology Drive NE, Minneapolis, MN 55418

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INDEPENDENT, INNOVATIVE, RELIABLE TRANSMISSION MANAGEMENT SERVICES

#### **PROPRIETARY**

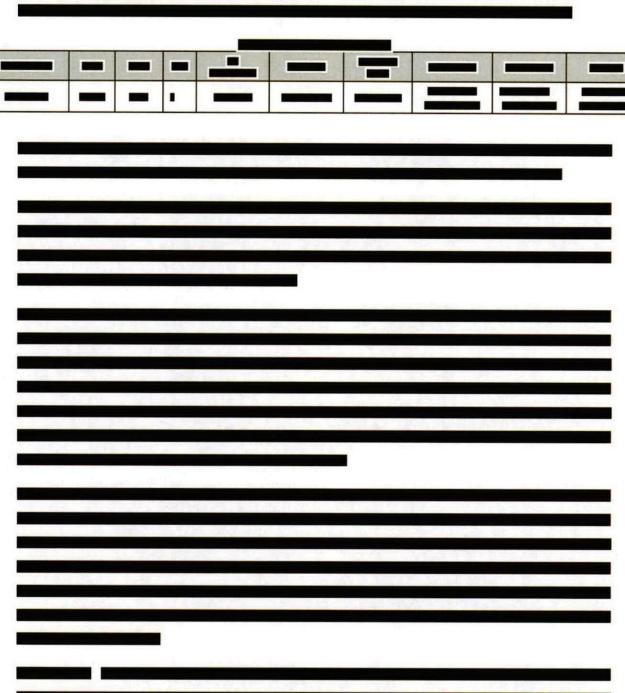
TranServ International, Inc. 3660 Technology Drive NE Minneapolis, MN 55418 Phone: 763.205.7099

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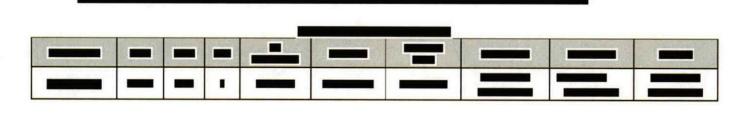
Louisville Gas & Electric and Kentucky Utilities
TSR LGE-2016-003 (TSR #82365428) System Impact Study

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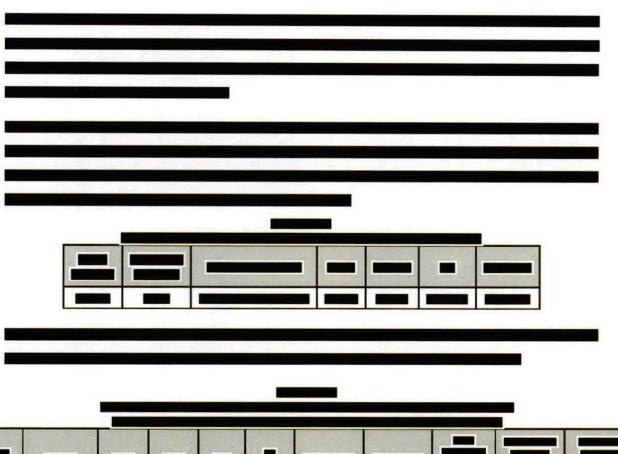
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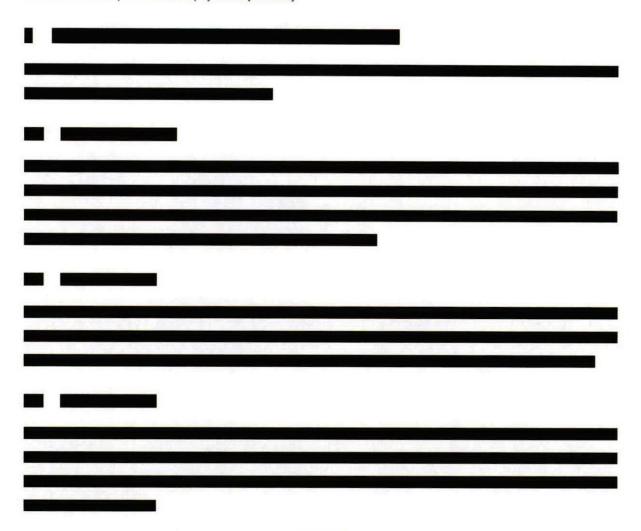


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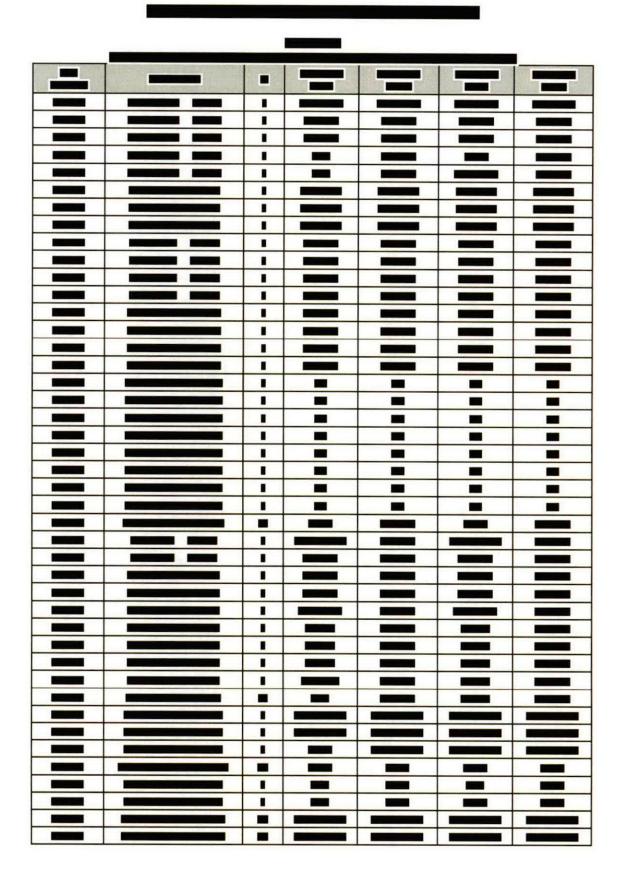
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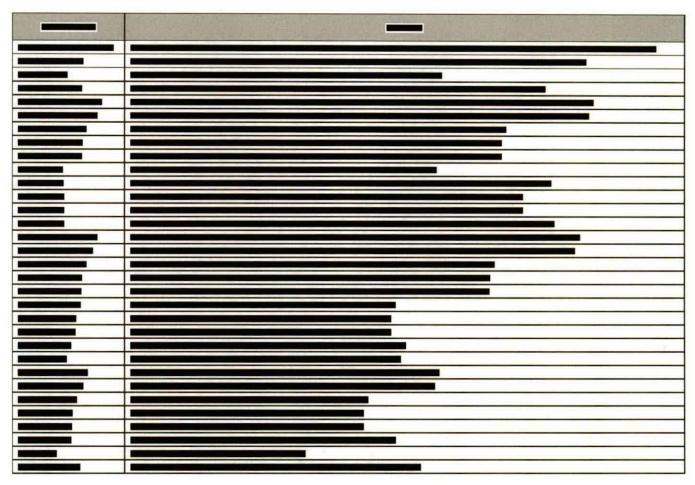
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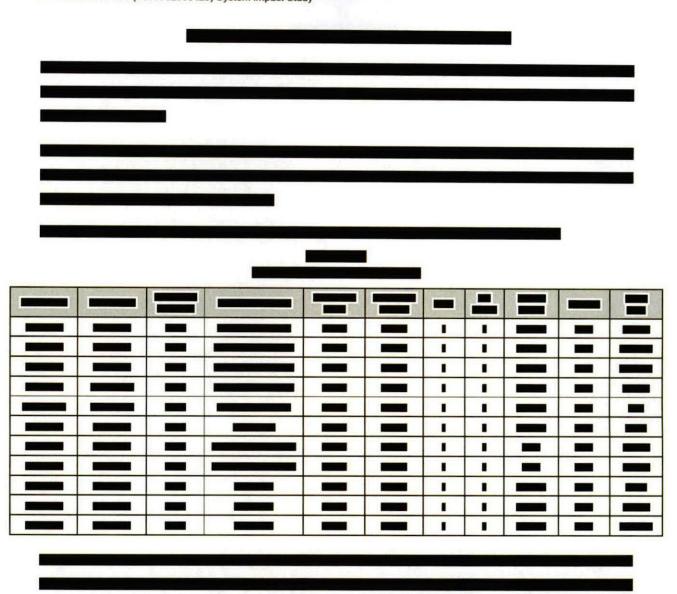
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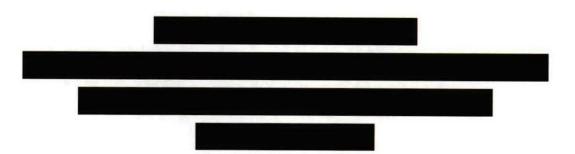
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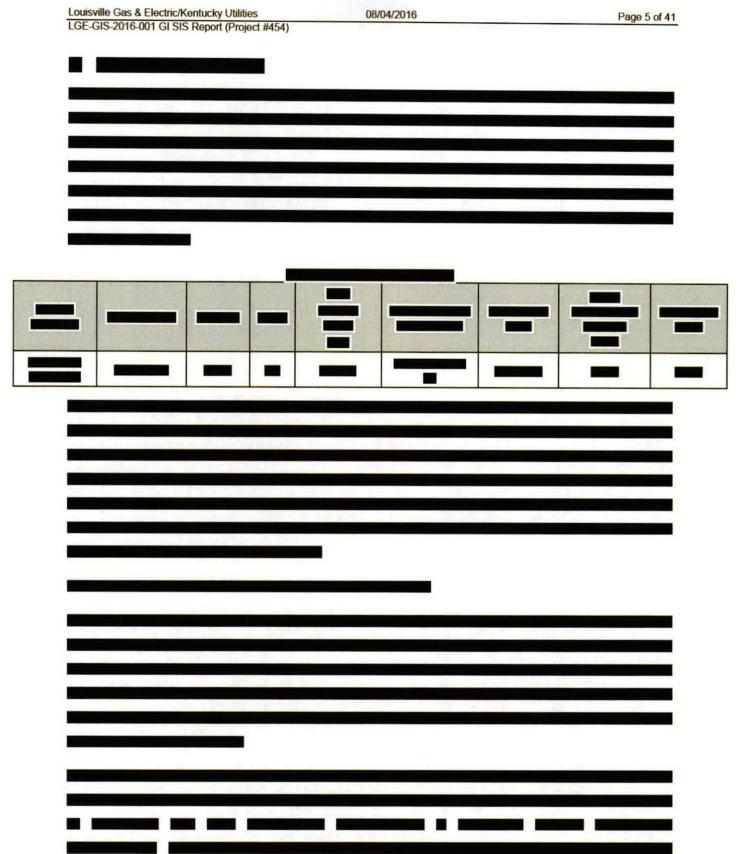
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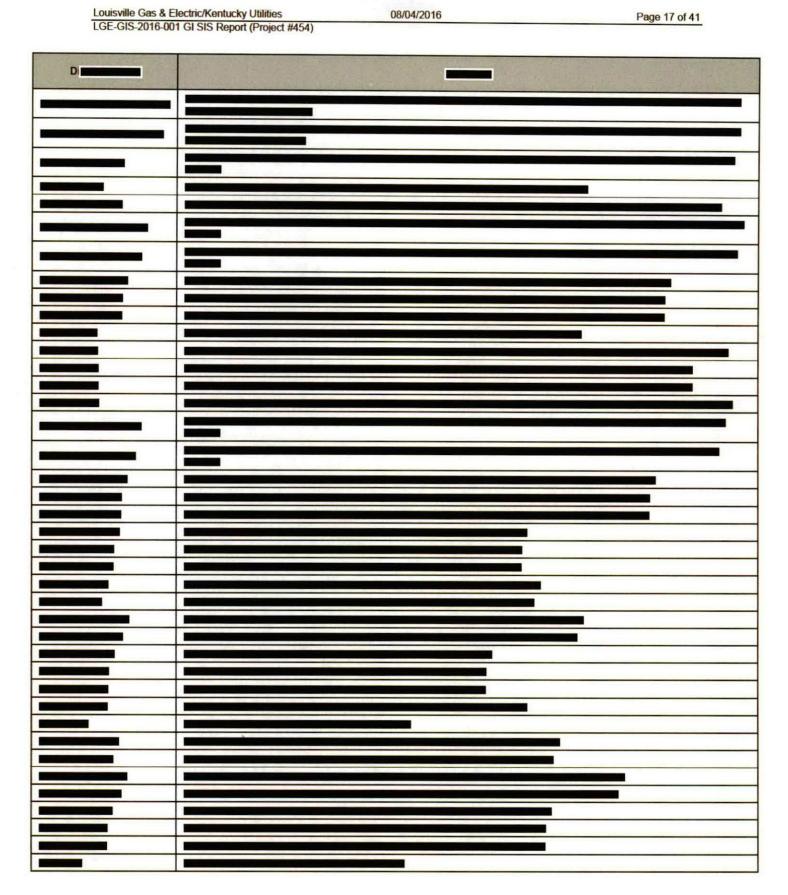
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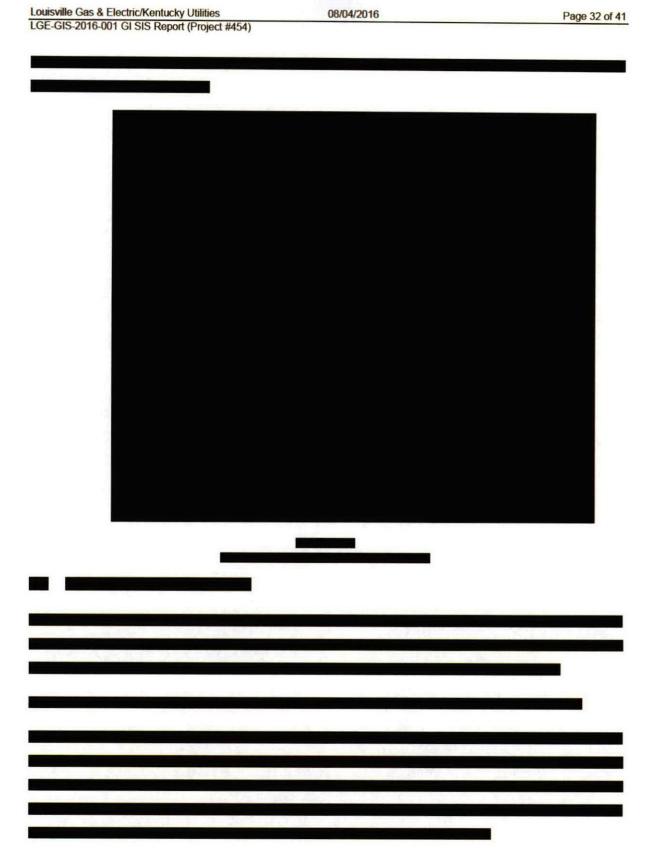
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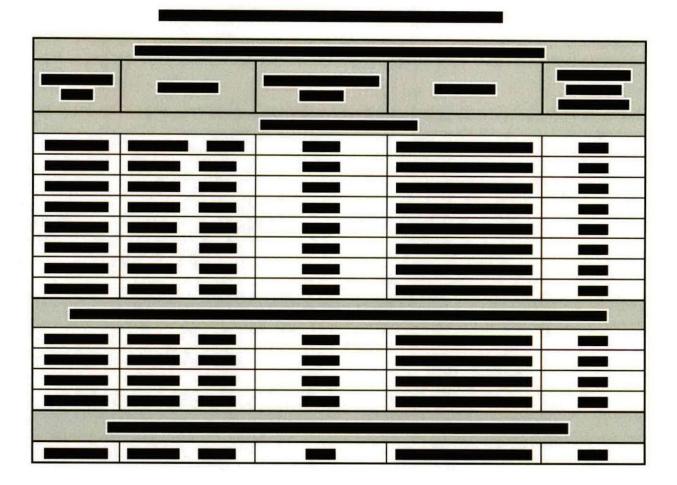
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COMMISSION STAFF'S FIRST REQUEST FOR INFORMATION DATED 08/30/16 REQUEST 15

RESPONSIBLE PARTY: Darrin Adams

Refer to the Crews Testimony at 19 regarding LG&E/KU's filing of a revised NITS Agreement for Federal Energy Regulatory Commission ('FERC'') approval. Provide the date the filing was made, or if it has not yet been made, the expected date of filing.

Response 15. The revised NITS Agreement has not yet been filed with the FERC. LG&E/KU has provided EKPC with a draft of the revised NITS Agreement for review and comment. EKPC anticipates that the NITS Agreement will be ready for filing no later than November 1, 2016.

COMMISSION STAFF'S FIRST REQUEST FOR INFORMATION DATED 08/30/16 REQUEST 16

**RESPONSIBLE PARTY:** 

**David Crews** 

Refer to Crews Testimony, Exhibit DC-1. The Report & Recommendations of the Renewable Energy Work Group recommended investing in a solar photovoltaic farm with an initial capacity of 25-30 kW. Explain what factors led to the decision to build a larger 8.5-MW solar facility rather than a smaller-sized facility.

Response 16. The collaborative envisioned small solar farms located on each of our Owner-Member systems. As EKPC pursued implementing the recommendation, the economics of a larger facility to serve all the Owner-Members drove EKPC to build a larger facility. The following factors led EKPC to build a facility larger than 25 to 30 kW:

- 1. The economies of larger scale project
- 2. The regulatory burden of building many small facilities
- 3. The administrative burden of financing many small facilities
- 4. The potential for inconsistent pricing and term from multiple projects
- 5. The expectation that demand will be far in excess of 25 to 30 kW

EKPC and the EKPC Owner-Members designed this community solar project and tariff to be an alternative to on-site solar. The economies of scale were important to the project so it could offer comparable value to retail members as an on-site solar proposal as demonstrated by the Brattle Testimony. Environmental permitting and Commission approvals of many small projects would drive the License Fee up and put undue burdens on regulators. Smaller projects do not receive financing that is as favorable as larger projects because the administrative burden for the financier is the same for a small project as it is for a larger project. The same is true for the administrative burden for EKPC. These factors would inflate the project cost and subsequently the License Fee to the retail members. A large project that can serve all 16 Owner-Members allows consistency across the membership and allows an Owner-Member to transfer Licenses to another Owner-Member without complications. Also, the marketing study that was performed indicates that EKPC's Owner-Members have an interest in renewable energy.

EKPC fully understands that in order to achieve a high subscription rate, it must engage those retail customers that are actively and conveniently green as well as engage those commercial and industrial customers that have sustainability goals.

COMMISSION STAFF'S FIRST REQUEST FOR INFORMATION DATED 08/30/16

**REQUEST 17** 

**RESPONSIBLE PARTY:** 

**David Crews** 

Request 17. Explain whether East Kentucky considered deploying its solar facility in smaller phases, and constructing a new phase only once the existing phases were substantially reserved.

Response 17. As detailed in Response 16, EKPC and its Owner-Members considered installing smaller installations. Response 16 describes the factors supporting the decision to move ahead with a project scaled to capture economies that larger projects enjoy.

While EKPC expects that it will achieve full subscription of the project, it may well take several years to do so. The participants that enroll at the beginning of EKPC's marketing campaign are not likely to be patient enough to wait until the project is fully-subscribed to begin construction as that would only delay the receipt of their benefits. EKPC believes they would pursue other options.

EKPC purposefully choose the location on its property that is adjacent to I-64 because of the visibility it will have to thousands of drivers and passengers that will pass it every day. Such visibility, as well as having a physical project to point to in the marketing of the project, is necessary to have a successful marketing campaign. Smaller-scale facilities could be easily missed by motorists.

### COMMISSION STAFF'S FIRST REQUEST FOR INFORMATION DATED 08/30/16 REQUEST 18

**RESPONSIBLE PARTY:** 

**David Crews** 

Request 18. Explain whether East Kentucky considered designing its solar program in a fashion in which customers contract for the solar capacity before the solar facility is built.

**Response 18.** Please refer to the responses to Requests 16 and 17.

### COMMISSION STAFF'S FIRST REQUEST FOR INFORMATION DATED 08/30/16 REQUEST 19

RESPONSIBLE PARTY: David Crews and Tom Stachnik

Refer to the Stachnik Testimony at 7 regarding the anticipated \$60,000 annual operations and maintenance expense for the community solar project.

Request 19a. Provide a breakdown, identifying account number and function, of the \$60,000.

Response 19a. Below is the breakdown of the \$60,000 O&M Cost and maintenance account numbers.

Operation Labor:	\$ 5,000	549001 651 1000 SF01
Maintenance Labor:	\$14,000	553000 651 1000 03860 SF01
Travel:	\$ 5,000	549001 651 2200 SF01
Structure Maintenance:	\$ 5,000	552000 651 3000 03850 SF01
Routine Solar Maintenance:	\$10,000	553000 651 3000 03860 SF01
Mowing Service Contract:	\$21,000	549001 651 4200 SF01
Total:	\$60,000	

Please note that while EKPC has provided this as an estimate of the account numbers it will use, the accounting may be impacted by RUS solar guidance which is expected to be published by 2017.

Request 19b. Explain why the cost of replacing inverters was not included in estimated annual operations and maintenance expense, how often an inverter typically needs to be replaced, and the approximate cost to replace the inverter.

Response 19b. The inverters have a 5-year warranty; however, EKPC's understanding is that the current design basis for inverters is 20 years or more without replacement or major maintenance. While EKPC does not expect replacement of any of the five inverters during the first 10 to 15 years of operation, inverters have not been in operation long enough for the industry to predict life expectancy with great certainty like it does for equipment like transformers. A conservative methodology for EKPC would be to assume the inverters have a short life and calculate an O&M expense based on a short inverter life. This could yield an overcollection for inverters and make the O&M expenses unattractive. EKPC believes that the most practical way to handle inverter maintenance and replacement costs is on an as-experienced basis and have these expenses begin when maintenance or replacement actually occurs. EKPC believes this yields a fair and reasonable way to handle inverter maintenance and potential replacement. As EKPC and the industry develop experience and are better able to predict inverter life expectancy with greater accuracy, more predictable O&M expenses will be available for future projects. Should EKPC have to replace an inverter late in the license period, it will recognize the cost of the inverter in the operation and maintenance expense prorated over the expected life of the new inverter.

COMMISSION STAFF'S FIRST REQUEST FOR INFORMATION DATED 08/30/16 REQUEST 20

RESPONSIBLE PARTY: David Crews and Michelle K. Carpenter

Request 20. Explain how the energy produced and sold from the Facility will affect the monthly fuel adjustment clause ("FAC") calculation.

Response 20. EKPC anticipates requesting a separate PJM bill for the solar activity to ensure it is effectively isolated from all other PJM purchases and sales. EKPC plans to proportion the generation associated with the solar facility between subscribed and unsubscribed panels. The share of generation associated with any unsubscribed panels will be included in total generation on the monthly FAC calculation. However, since there are no fuel costs, no corresponding costs will be included in the FAC. The subscribed portion of generation will be sold into PJM for the sole benefit of the subscribers and those subscribers also bear the operation and maintenance costs associated with the subscribed panels. Therefore, the subscribed generation should be excluded from the FAC calculation.

COMMISSION STAFF'S FIRST REQUEST FOR INFORMATION DATED 08/30/16 REQUEST 21

**RESPONSIBLE PARTY:** David Crews

Request 21. Provide the minutes of each Board meeting at which the proposed solar program was discussed.

Response 21. The minutes of each Board meeting at which the proposed solar program was discussed are being filed under seal as confidential information with the non-solar information reducted. The Board Agenda Item and the Board Resolution are provided on Pages 2 - 5 of this response.

### **Board Agenda Item**

TO:

Strategic Issues Committee and Board of Directors

FROM:

Anthony S. Campbell

DATE:

November 25, 2015

SUBJECT:

2015 Solar RFP Recommendation

**KEY** 

A solar project supports the pursuit of prudent diversity in the fuel

**MEASURE(S)** mix of the generation portfolio.

### Background

East Kentucky Power Cooperative, Inc., ("EKPC") seeks to meet its Owner Members' strategic goal of diversifying the fuel mix in its generation portfolio. Therefore, EKPC authorized the National Renewables Cooperative Organization ("NRCO") to issue a Request For Proposals ("RFP") for up to 10 MW of solar generation that could be constructed at two EKPC-owned sites.

### Justification and Strategic Analysis

NRCO sent the RFP to 29 different firms. Responses were received from nine distinct bidders, many submitting multiple options. Bidders favored the EKPC Headquarters site as the first preference due to proximity to I-64, visibility and ease of access. Based on the responses to the RFP, NRCO and EKPC narrowed the potential counter parties to a short list of the four best evaluated offers based on price, experience and process understanding. NRCO submitted additional questions to clarify each offer from the short list bidders. Based on discussions with the Owner Member CEOs, EKPC recommends moving forward with a solar project in the 8 to 10 MW range. NRCO and, subject to Board approval, EKPC will negotiate with the short listed bidders a contract with mutually agreeable terms and conditions.

#### Recommendation

EKPC Management recommends that the Board delegate authority to Management to negotiate with the short-listed bidders; determine the best negotiated bid; and execute a contract with that bidder not to exceed \$18 Million with a \$2 Million contingency.

ASC:jjt

### Resolution

#### 2015 SOLAR RFP RECOMMENDATION

Whereas, East Kentucky Power Cooperative, Inc., ("EKPC") seeks to meet its Owner Members' strategic goal of diversifying the fuel mix in its generation portfolio;

Whereas, EKPC authorized the National Renewables Cooperative Organization ("NRCO") to issue a Request for Proposals ("RFP") for up to 10 MW of solar generation;

Whereas, NRCO sent the RFP to 29 firms and received offers from 9 bidders offering multiple options;

Whereas, EKPC and NRCO developed a short list of bidders based on price, experience and process understanding and then requested clarified and updated offers from those selected bidders; and

Whereas, EKPC Management and the Board's Strategic Issues Committee recommend that the Board delegate authority to Management to negotiate with the short-listed bidders; determine the best negotiated bid; and execute a contract with that bidder not to exceed \$18 Million with a \$2 Million contingency; now, therefore, be it

Resolved, That the Board hereby delegates authority to Management to negotiate with the short-listed bidders to construct a solar generation facility; determine the best negotiated bid; and execute a contract with that bidder not to exceed \$18 Million with a \$2 Million contingency and Management is authorized to file any required regulatory filings.

### FROM THE MINUTE BOOK OF PROCEEDINGS OF THE BOARD OF DIRECTORS OF EAST KENTUCKY POWER COOPERATIVE, INC.

At a regular meeting of the Board of Directors of East Kentucky Power Cooperative, Inc. held at the Headquarters Building, 4775 Lexington Road, located in Winchester, Kentucky, on Tuesday, December 8, 2015, at 9:30 a.m., EST, the following business was transacted:

#### 2015 Solar RFP Recommendation

After review of the applicable information, a motion to approve the 2015 Solar RFP Recommendation was made by Strategic Issues Committee Chairman Landis Cornett, and passed by the full Board to approve the following:

Whereas, East Kentucky Power Cooperative, Inc., ("EKPC") seeks to meet its Owner Members' strategic goal of diversifying the fuel mix in its generation portfolio;

Whereas, EKPC authorized the National Renewables Cooperative Organization ("NRCO") to issue a Request for Proposals ("RFP") for up to 10 MW of solar generation;

Whereas, NRCO sent the RFP to 29 firms and received offers from 9 bidders offering multiple options;

Whereas, EKPC and NRCO developed a short list of bidders based on price, experience and process understanding and then requested clarified and updated offers from those selected bidders; and

Whereas, EKPC Management and the Board's Strategic Issues Committee recommend that the Board delegate authority to Management to negotiate with the short-listed bidders; determine the best negotiated bid; and execute a contract with that bidder not to exceed \$18 Million with a \$2 Million contingency; now, therefore, be it

Resolved. That the Board hereby delegates authority to Management to negotiate with the short-listed bidders to construct a solar generation facility; determine the best negotiated bid; and execute a contract with that bidder not to exceed \$18 Million with a \$2 Million contingency and Management is authorized to file any required regulatory filings.

PSC Request 21 Page 5 of 5

The foregoing is a true and exact copy of a resolution passed at a meeting called pursuant to proper notice at which a quorum was present and which now appears in the Minute Book of Proceedings of the Board of Directors of the Cooperative, and said resolution has not been rescinded or modified.

Witness my hand and seal this 8th day of December 2015.

Michael Adams, Secretary

Corporate Seal

### COMMISSION STAFF'S FIRST REQUEST FOR INFORMATION DATED 08/30/16 REQUEST 22

**RESPONSIBLE PARTY:** 

**David Crews** 

Request 22. To the extent any such documentation exists, provide any documents received by East Kentucky from its members, or the cooperatives end users, expressing their interest in participating in a solar program.

Response 22. While the solar program has been discussed extensively with the Members, there is no documentation that is responsive to this request. EKPC has not solicited written support for the project from third parties.

COMMISSION STAFF'S FIRST REQUEST FOR INFORMATION DATED 08/30/16 REQUEST 23

**RESPONSIBLE PARTY:** 

Michelle K. Carpenter and David Crews

Request 23. Using the PJM hourly Locational Marginal Prices ("LMP") for July 2016, provide a sample bill from East Kentucky to one of its member cooperatives showing the impact had that member reserved 1 MW of the solar facility, compared to the bill that member cooperative would have received absent the solar program. Assume that the solar generation was uniform for each hour of the month in which the solar facility would generate power.

Response 23. As the Community Solar project was conceived, EKPC believed that it would be necessary for its Owner-Members to reserve capacity from the solar facility in anticipation of what percentage of the total facility capacity their retail members might desire to license. As EKPC continues to work with vendors to develop the computer interfaces that participating retail members will use to actually license a panel, the need for anticipatory reservations by EKPC's Owner-Members may no longer be necessary. The elimination of the Owner-Member reservation process will result in greater efficiency both for EKPC and its Owner-Members. This change will also enable participating retail members to experience a much smoother licensing process.

Since EKPC's Owner-Members will share the unsubscribed portion of the solar facility as a system resource, the cost of any unsubscribed capacity will be shared among EKPC's Owner-Members in the same proportion that the costs of EKPC's existing generation fleet is apportioned. While EKPC is not currently proposing a base rate increase to pay for unsubscribed costs, it requests that these costs be considered a cost of service for future ratemaking purposes. For the subscribed portion of the solar facility, EKPC's Owner-Members will see a direct flow through of the sum of the Panel Production Credits attributed to their participating retail members' subscribed capacity on their monthly power bill.

For the purposes of illustrating the requested impact of 1 MW of subscribed solar panels on an Owner-Member's July 2016 monthly power bill, the following assumptions and computations were used:

Acci	Im	mti		
Assu	4111	ULI	vı	13.

Estimated Generation for July (MWh)	1581
Level Generation (MW per hour for July)	2.125
Level Generation Value for July based on hourly PJM LMP	\$46,491
PJM Capacity Base Residual Auction Value (per MW)	\$120
PJM Capacity Factor for Solar	35%
Year 1 Estimated O&M, Insurance, Taxes	\$133,839
Total Solar Farm Panels	32,300
Retail Panels Subscribed (1 MW equivalent)	3,800
July Solar REC Market Value	\$11.75
Per Panel Computations:	
Energy Credit Per Panel (\$46.491/32.300 Panels)	\$11.441

•	
Energy Credit Per Panel (\$46,491/32,300 Panels)	\$(1.44)
Capacity Credit Per Panel (8.5MW*\$120*35%*31/32,300)	\$(.34)
O&M Charge Per Panel (\$133,839/12/32,300)	\$.35
SREC Credit Per Panel*	\$0

<sup>\*</sup>RECs sold will not be distributed until following year

It should be noted that PJM estimates the availability of solar for capacity purposes at thirty-five percent. Therefore, this percentage was applied to EKPC's base residual auction price to arrive at the portion of the capacity value attributable to solar. Please see Pages 4 and 5 of this response, for a sample Owner-Member power bill summary page for July 2016 and supplemental itemization of the components comprising the production panel credit on the face of the bill. As prescribed in the proposed wholesale tariff, the net production panel credit on the sample bill does not impact the amounts billed for the fuel adjustment or environmental surcharge. The production panel credit for July was calculated as \$5,434 which would have reduced the Owner-Member's July bill to \$8,595,058. The actual amount billed to the Owner-Member for July 2016 was \$8,600,492, which is shown on Page 6 of this response.

**CO-OP Amount Due** 

### EAST KENTUCKY POWER COOPERATIVE INC. P.O. Box 707 Winchester, Kentucky 40391

Wholesale Power Invoice Substation Detail Charges July 2016

Substation	Rate Sch	Billing Notes	Billing Demand	кwн	Demand Charge	Energy Charge	Metering Point	Sub/Wheeling Charge	Fuel Adj	DLC	Sur	Total Charges
CO-OP Totals Panel Production Credit			263,868	124,608,092	1,613,582	6,018,152	4,608	120,747	-545,784	1,4	113,113	8,624,41 -5,43
Direct Load										20,442	-4,007	-24,4
Green Power				20,900						20,442	4,007	5
Generator Credit				0	0	0			0		0	

<sup>\*</sup> Consumer billed from a contract minimum

Normally due in usable funds by the 21st of the month, subject to the provisions in EKPC Board Policy No. 204, related to weekends and holidays.

\$8,595,058

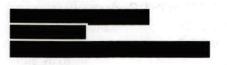
SAMPLE INVOICE



EAST KENTUCKY POWER COOPERATIVE INC. P.O. Box 707 Winchester, Kentucky 40391 Panel Production Credit

July 2016

Solar	Capacity	Energy	O & M	Total
Panels	Credit	Credit	Charge	Credit
3800	-\$1,292.00	-\$5,472.00	\$1,330.00	-\$5,434.0



### EAST KENTUCKY POWER COOPERATIVE INC. P.O. Box 707 Winchester, Kentucky 40391

Wholesale Power Invoice Substation Detail Charges July 2016

Substation	10 N	Rate Sch	Billing Notes	Billin Dema		кwн	Demand Charge	Energy Charge	Metering Point	Sub/Wheeling Charge	Fuel Adj	DLC	Sur	Total Charges
CO-OP Totals				263,8	868	124,608,092	1,613,582	6,018,152	4,608	120,747	-545,784	1,4	13,113	8,624,41
Direct Load												20.442	4.007	24.44
<b>Green Power</b>						20,900						20,442	-4,007	-24,44 52
<b>Generator Credit</b>						0	0	0			0		0	

CO OP Amount Due

Normally due in usable funds by the 21st of the month, subject to the provisions in EKPC Board Policy No. 204, related to weekends and holidays.

\$8,600,492

58 600, 492 CO-OP Amount Due

<sup>\*</sup> Consumer billed from a contract minimum

COMMISSION STAFF'S FIRST REQUEST FOR INFORMATION DATED 08/30/16

**REQUEST 24** 

RESPONSIBLE PARTY:

Michelle K. Carpenter

Request 24. Using the hourly PJM LMP prices for July 2016, provide a sample bill from one of East Kentucky's members cooperatives to one of their end users showing the impact had that end-user reserved one panel of the solar facility, compared to the bill that member would have received absent the solar program. Assume that the solar generation was uniform for each hour of the month in which the solar facility would generate power.

Response 24. Based upon the assumptions and per-panel calculations outlined in Response 23, an end-use member with one subscribed solar panel would receive a \$1.43 credit on their July 2016 bill. Given that EKPC does not prescribe the format of Owner-Member bills to their end-use members, no sample Owner-Member bill depicting the placement of the \$1.43 credit has been provided with this response.