City of Needles, California
Request for Council Action

☒ CITY COUNCIL ☐ NPUA ☐ BOARD OF PUBLIC UTILITIES
☒ Regular ☐ Special

Meeting Date: August 13, 2019

Title: Resolution 2019 – 51 California Energy Commission Residential Photovoltaic Determination

Background: The California Energy Commission (CEC) updated the State's 2019 Title 24, Part 6, Building Energy Efficiency Standards ("Standards"). The latest update to the Standards takes effect in *2020.* The Standards are designed to reduce wasteful and unnecessary energy consumption in both new and existing buildings.

In particular, section 150.1(c)14 of the Standards now requires the installation of solar photovoltaics (PV) for all new multifamily homes under three stories and all new single family homes, among other buildings. Rooftop solar can potentially create a cost shift from solar customers to non-solar customers, because those with solar pay lower electricity bills and thus pay less to maintain the grid. Section 150.1(c)14 does not relate to existing buildings.

Section 10-109(k) of the administrative regulations associated with the Standards provides for a process whereby the CEC can determine that the solar PV requirements are not cost-effective and should not apply within a service area. While referred to as a cost-effectiveness "determination," this effectively is an exemption from the residential solar PV requirement. Obtaining such an exemption would still allow anyone within Needles service area to add solar PV to new or existing buildings at their discretion but would not require solar PV for the new residential buildings noted above.

In April 2019, the City of Needles and Braun Blaising Smith Wynne, P.C. began discussions with the CEC to determine if the City would be eligible for this cost-effectiveness determination.

The City provided the following documents/information to the CEC to support their analysis of costs in the Needles service area:

- Needles' population, median household income statistics and location
- Current and historical electrical rates – this illustrates the low electrical rates within the Needles
- Needles' current electric rate calculation – this demonstrates the low hydropower and over-hydro rates
- Needles' annual base rate calculation tool, illustrating how Needles develops rates

#4

City of Needles, California
Request for Council Action

The City is requesting the CEC determine the residential solar PV requirement of Section 150.1(c)14 should not apply as it is not cost-effective, may negatively impact citizens and worsen Needles already precarious economic position.

In order to receive a determination, the City must hold a public hearing in order to receive public comment on the submission of this request for a determination regarding the cost-effectiveness of the PV requirement and subsequently, receive City Council approval of this action.

Public Notification: A Public Hearing Notice was placed in the Needles Desert Star and published on July 17, 2019 and July 24, 2019; notice was posted in two public places.

Fiscal Impact: The solar PV mandate could potentially exacerbate the electric utility revenue and grid management maintenance costs.

Recommended Action: ***Move*** to approve Resolution 2019 – 51 requesting a cost-effective determination by the California Energy Commission pursuant to Section 10-109(k) of the 2019 Energy Code.

Submitted By: Rainie Torrance, Senior Accountant

City Management Review: Rick **Date:** 8/8/19

Approved: ☐	Not Approved: ☐	Tabled: ☐	Other: ☐
			Agenda Item: _____

RESOLUTION NO. 2019- 51

A RESOLUTION OF THE CITY OF NEEDLES, CALIFORNIA, REQUESTING A COST-EFFECTIVENESS DETERMINATION BY THE CALIFORNIA ENERGY COMMISSION PURSUANT TO SECTION 10-109(k) OF THE 2019 ENERGY CODE

WHEREAS, the California Energy Commission updated the California Code of Regulations, Title 24, Part 6, known as the Building Energy Efficiency Standards (Standards);

WHEREAS, Section 150.1(c)14 of the Standards now requires the installation of solar photovoltaics (PV) for all low-rise residential buildings, which includes all new multifamily homes of three stories or less and all new single-family homes;

WHEREAS, Section 10-109(k) of the administrative regulations associated with the Standards provides a process whereby the California Energy Commission can determine that the solar PV requirements are not cost-effective and should not apply within a service area;

WHEREAS, the City of Needles held a public hearing as required by Section 10-109(k);

WHEREAS, the City of Needles requests a determination from the California Energy Commission that Section 150.1(c)14 is not cost-effective and should not apply within the City of Needles service area;

WHEREAS, the request for a determination would still allow anyone within Needles' service area to add solar PV to new or existing buildings at their discretion;

NOW, THEREFORE, BE IT RESOLVED that the City Council of the City of Needles, California hereby approves Resolution No. 2019-51 requesting a cost-effectiveness determination by the California Energy Commission pursuant to Section 10-109(k) of the 2019 Energy Code.

PASSED, APPROVED AND ADOPTED at a regular meeting of the City Council of the City of Needles, California, held on the 13th day of August, 2019, by the following roll call vote:

AYES:

NOES:

ABSENT:

ABSTAIN:

_____
Mayor

(SEAL)

ATTEST:_____
City Clerk

APPROVED AS TO FORM:

_____
City Attorney

City of Needles

817 Third Street • Needles, California 92363
(760) 326-2113 • FAX (760) 326-6765
www.cityofneedles.com

Mayor, Jeff Williams
Vice Mayor Edward T. Paget, M.D
Councilmember Shawn Gudmundson
Councilmember Tona Belt
Councilmember Clayton Hazlewood
Councilmember Tim Terral
Councilmember Zachery Longacre

City Manager Rick Daniels

July 2, 2019

Maziar Shirakh, P.E.
Senior Engineer, Building Energy Efficiency Standards
California Energy Commission
1516 Ninth Street
Sacramento, CA 95814-5512
Maziar.Shirakh@energy.ca.gov

Re: City of Needles' Request for a Residential Photovoltaic Determination

Dear Mr. Shirakh,

On behalf of the City of Needles ("City" or "Needles"), I am writing to seek a determination from the California Energy Commission ("Commission") under Section 10-109(k) of the 2019 Energy Code. Section 10-109(k) allows the Commission to determine that the photovoltaic ("PV") requirements of Section 150.1(c)14 should not apply, if the Commission finds that "the implementation of public agency rules regarding utility system costs and revenue requirements, compensation for customer-owned generation, or interconnection fees, causes the Commission's cost effectiveness conclusions to not hold for particular buildings."

The City of Needles is a small community of roughly 5,000 residents nestled on the eastern edge of California, touching Arizona and a short distance from Nevada. Needles provides electric service to its residents through Needles Public Utility Authority ("NPUA"). The median household income is $31,372, making Needles a severely disadvantaged community. Currently, very few new houses (approximately 2-3) are built in Needles each year; residents' economic condition likely contributes to this lack of new development. Adding the residential PV requirement in this community may worsen Needles already precarious position.

Importantly, the residential PV requirement is not cost-effective for Needles' citizens. While Needles electric rates fluctuate based on the season and customer consumption, they are some of the lowest in the state. For example, this summer an NPUA customer will receive hydropower for the first 742 kWhs at a rate of $0.0621/kWh. When they exceed this amount, the price increases to an "over hydro" rate of 0.0917/kWh. For the typical residential electric customer, we believe that the Section 150.1(c)14 mandate is not cost-effective within Needles' service area and a determination under Section 10-109(k) is appropriate.

NPUA reviewed and approved this application for a determination from the Commission. Needles then held a public meeting and received public comment on the submission of this request for a determination regarding the cost-effectiveness of the PV requirement, and the city council approved this action. The City of Needles respectfully requests that the California Energy Commission make a determination under Section 10-109(k) of the 2019 Energy Code that the photovoltaic requirements of Section 150.1(c)14 do not apply within Needles' service area.

Sincerely,

Rick Daniels
City of Needles, City Manager
rdaniels@cityofneedles.com

Cc (email only): Rebecca Westmore
Bill Pennington
Christopher Meyer
Danny Tam

Electric Rates – Effective October 1, 2018 (Rates were calculated using CPI of 3.2%)

Winter Rates – October 1 thru February 28

Basic Service Charge		$29.82
Hydro Allotment	**406 KWH**	.0652
Over Hydro		.0917
CA Conservation Charge		.0033
Utility Users Tax		2.5%

Summer Rates – March 1 – October 30

Basic Service Charge		$29.82
Hydro Allotment	**742 KWH**	.0621
Over Hydro		.0917
CA Conservation Charge		.0033
Utility Users Tax		2.5%

Electric Rates – Effective October 1, 2017 (Rates were calculated using CPI of 2%)

Winter Rates – October 1 thru February 2018

Basic Service Charge	$28.90
Hydro Allotment **414 KWH**	.0660
Over Hydro	.0844
CA Conservation Charge	.0038
Utility Users Tax	2.5%

Electric Rates – Effective March 1, 2018 (Rates were calculated using CPI of 2%)

Summer Rates – March 1 thru September 2018

Basic Service Charge	$28.90
Hydro Allotment **756 KWH**	.0629
Over Hydro	.0844
CA Conservation Charge	.0038
Utility Users Tax	2.5%

Electric Rates – Effective October 1, 2016 (Rates were calculated using CPI of 1.61%)

Winter Rates – October 1 thru December 31

Basic Service Charge	$28.33
Hydro Allotment **411 KWH**	.0693
Over Hydro	.0933
CA Conservation Charge	.0039
Utility Users Tax	2.5%

Electric Rates – Effective January 1, 2017 (Rates were calculated using CPI of 1.61%)

Winter Rates – January 1 thru February 28

Basic Service Charge	$28.33
Hydro Allotment **411 KWH**	.0693
Over Hydro	.0459
CA Conservation Charge	.0039
Utility Users Tax	2.5%

Electric Rates – Effective March 1, 2017 (Rates were calculated using CPI of 1.61%)

Summer Rates – March 1 thru March 30

Basic Service Charge	$28.33
Hydro Allotment **751 KWH**	.0651
Over Hydro	.0459
CA Conservation Charge	.0039
Utility Users Tax	2.5%

Electric Rates – Effective November 1, 2015 (Rates were calculated using CPI of 1.1%)

Winter Rates – November 1 thru February 28

Basic Service Charge		$27.88
Hydro Allotment	**389 KWH**	.0713
Over Hydro		.1007
CA Conservation Charge		.0039
Utility Users Tax		2.5%

Summer Rates – March 1 thru October 31

Basic Service Charge		$27.88
Hydro Allotment	**712 KWH**	.0680
Over Hydro		.1007
CA Conservation Charge		.0039
Utility Users Tax		2.5%

The electric rates for November 2014

Basic Service Charge		$27.58
El Hydro	370 KWH	.0843
El Usage		.1123
El Conservation		.0039

The electric rates for March 2015

Basic Service Charge		$27.58
El Hydro	697 KWH	.0804
El Usage		.1123
El Conservation		.0039

The electric rates for April 2015 (.0025% PCA attached to Usage to offset the PCA being in the red until September 2015)

Basic Service Charge		$27.58
El Hydro	697 KWH	.0804
El Usage		
El Conservation		.0039

SECTION 2 AMENDED BY NEEDLES CITY COUNCIL AND NEEDLES PUBLIC UTILITIES AUTHORITY DECEMBER 8, 2015 AMENDED MAY 7, 2019

PHOTOVOLTAIC INTERCONNECTION AGREEMENT FOR NET ENERGY METERING FROM RESIDENTIAL AND SMALL COMMERCIAL SOLAR ELECTRIC GENERATING FACILITIES OF 10 KILOWATTS OR LESS

_____("Customer-Generator"), and
Needles Public Utility Authority **("NPUA")** referred to collectively as "Parties" and individually as "Party", agree
as follows:

1. SOLAR-ELECTRIC GENERATING FACILITY:

1.1 PVID Number: _____

1.2 PV Array Rating: _____kW.

1.3 Address: _____

1.4 Facility will be ready for operation on or about_____
(date)

1.5 Location of NPUA Substation and Circuit:

_____

1.6 Operating Option

Customer-Generator has elected to operate its solar-electric generating facility in parallel with NPUA's facilities. The solar-electric generating facility is intended primarily to offset part or all of the Customer-Generator's own electrical requirements.

2. PAYMENT FOR NET ENERGY

2.1 For eligible residential and small commercial customer-generators, the net energy metering calculation shall be made by measuring the difference between the electricity supplied to the eligible customer-generator and the electricity generated by the eligible customer-generator and fed back to the electric grid over a monthly and 12-month period. The following rule shall apply to the annualized net metering calculation:

2.2 Customer will be billed on a monthly basis, regardless of Customer's previous billing cycle. The monthly Net Energy Metering calculation shall be made by measuring the difference between the electricity supplied to the Customer and the electricity generated by the Customer and fed back to the grid over a normal one-month billing period.

2.3 At the end of each one-month billing period following the date of first interconnection, NPUA shall determine if Customer was a net consumer or a net producer of electricity during the one-month time period.

2.4 In the event the electricity supplied by NPUA during the one-month period exceeds the electricity generated and fed back to the grid by Customer during the same period, Customer is a net energy consumer. If Customer is a net energy consumer, NPUA shall bill Customer for the net energy consumption during such billing period based on the Customer's Rate Schedule and Customer shall pay for such net energy consumption monthly in accordance with Customer's monthly billing statement.

2.5 In the event the electricity supplied by NPUA during the one-month period is less than the electricity generated and fed back to the grid by Customer during the same period, Customer is a net energy producer. If Customer is a net energy producer, any excess kilowatt-hours generated during the billing cycle shall be carried over to the following billing period on a monetary basis until the end of the 12-month period.

2.6 Any net monthly consumption of electricity shall be calculated according to the terms of the rate schedule. If Customer is a net generator over a billing period, the net kilowatt-hours generated shall be valued at the same price per kilowatt-hour as NPUA would charge for the baseline quantity of electricity during that billing period, and if the number of kilowatt-hours generated exceeds the baseline quantity, the excess shall be valued at the same price per kilowatt-hour as NPUA would charge electricity over the baseline quantity during the billing period.

2.7 The eligible customer –generator account shall, at the end of the 12-month period following the date of final interconnection of the customer-generator's system with the NPUA distribution system, and at each anniversary month thereafter, be evaluated and reconciled for electricity used or generated during the period.

2.8 NPUA shall retain any Net Surplus Energy generated by Customer, including any associated environmental attributes or renewable energy credits ("RECs"), and Customer's credits shall be reset to zero for the subsequent 12-month period. No payment will be made to Customer for the excess energy delivered to NPUA's grid, unless Customer elects a compensation option in Subsection 2.11.

2.9 NPUA will determine if the customer-generator was a net consumer or a net producer of electricity during that period.

2.10 Customer may be eligible for Net Surplus Energy Compensation. The Customer's Net Surplus Energy Compensation shall be calculated over a 12-month period. If Customer is eligible for Net Surplus Compensation, customer shall be compensated pursuant to the method selected by Customer in Subsection 2.11. Such Net Surplus Compensation Rate shall provide just and reasonable compensation for the value of the Net Surplus Energy, and shall be adopted by the Board of Public Utilities and the Needles Public Utility Authority. Such Net Surplus Compensation Rate shall be reviewed and subject to change on an annual basis.

2.11 At the end of the 12-month period, upon certification by the Customer that they have sole ownership of the environmental attributes and RECs associated with the energy generated from the Generating Facility in accordance with Subsection 2.12 Customer may receive Net Surplus Energy Compensation for Net Surplus Energy by affirmatively electing one of the following methods (Please initial just one): The Customer will be required to complete this form annually prior to the end of a 12-month period. If an annual form is not returned by the requested due date the response below will automatically be the default response.

(a). ___ Receive monetary compensation for Net Surplus Generation exported to NPUA during the prior 12-month period at the Net Surplus Energy Compensation Rate

(b).____ Receive the Net Surplus Energy Compensation as a kilowatt-hour credit calculated using the Net Surplus Energy Compensation rate and applied against future billing periods.

___ (Please initial) By making this election, I also agree that all environmental attributes and RECs associated with the kilowatt-hours generated shall be the property of NPUA.

2.12 Customer hereby certifies that they have sole ownership of the environmental attributes and RECs associated with the energy generated from the Generating Facility. For Customers who elect to receive Net Surplus Energy Compensation based on a per kilowatt-hour rate in accordance with Subsection 2.11, the environmental attributes and RECs associated with the kilowatt-hours in which the Customer received Net Surplus Energy Compensation at the per kilowatt-hour rate shall be the property of the NPUA. Customer hereby transfers to the NPUA all rights, title, and interest Customer has to such environmental attributes and RECs. Customers who elect to receive Net Surplus Energy Compensation based on a per kilowatt-hour credit calculated using the net surplus energy compensation rate and applied in accordance with Subsection 2.11 may elect to transfer to City all rights, title, and interest Customer has to such environmental attributes and RECs.

2.13 All net consumption over 12 months will be charged the Utility Users Tax, not to exceed the rate of two and a half percent (2.5%) as

established by Ordinance No. 545-AC and the Mandated Conservation fee (adopted every October) as established by Resolution No. 7-24-07.

3. INTERRUPTION OR REDUCTION OF DELIVERIES

3.1 NPUA shall not be obligated to accept or pay for, and may require Customer-Generator to interrupt or reduce, deliveries of as-available energy:

(a) When necessary in order to construct, install, maintain, repair, replace, remove,
Investigate, or inspect any of its equipment or any part of its system; or

(b) If NPUA determines that curtailment, interruption, or reduction is necessary because of emergencies, forced outages, force majeure, or compliance with prudent electrical practices.

3.2 Whenever possible, NPUA shall give Customer-Generator reasonable notice of the possibility that interruption or reduction of deliveries may be required.

3.3 Notwithstanding any other provisions of this Agreement, if at any time NPUA determines that either:

(a) the facility may endanger NPUA personnel, or

(b) the continued operation of Customer-Generator's facility may endanger the integrity of NPUA's 's electric system, NPUA shall have the right to disconnect Customer-Generator's facility from NPUA 's electric system. Customer-Generator's facility shall remain disconnected until such time as NPUA is satisfied that the conditions(s) referenced in (a) or (b) of this Section 3.3 have been corrected.

4. INTERCONNECTION

4.1 Customer-Generator shall deliver the as-available energy to NPUA at the utility's meter.

4.2 Customer-Generator shall pay for designing, installing, operating, and maintaining the solar-electric generating facility in accordance with all applicable laws and regulations and shall comply with NPUA's Appendix A, which is attached hereto.

4.3 Customer-Generator shall not commence parallel operation of the generator facility until written approval of the interconnection facilities has been given by NPUA. Such approval shall not be unreasonably withheld. NPUA shall have the right to have representatives present at the initial testing of Customer-Generator's protective apparatus.

5. METER REQUIREMENTS

5.1 NPUA shall own, operate and maintain on Customer's premises a single meter capable of registering the flow of electricity in two directions ("Required Meter"). In addition, the meter shall be capable of recording time-of-use information for all customers. NPUA may waive metering requirements of this Section; provided such waiver shall be applied in a non-discriminatory manner.

5.2 If the existing electrical meter of Customer is not capable of measuring the flow of electricity in two directions or supplying time-of-use information, Customer shall be responsible for all expenses involved in NPUA purchase and installation of a Required Meter. NPUA may waive metering expenses of this Section; provided such a waiver shall be applied in a non-discriminatory manner.

6. OWNERSHIP OF ENVIRONMENTAL ATTRIBUTES

Customer shall assign NPUA any and all environmental attributes, renewable energy credits ("RECs"), green tags, energy or carbon credits/allowances with respect to the PV solar systems, and agree that NPUA shall have sole discretion and full benefits of any and all environmental attributes from distributed solar generation within NPUA service territory.

5. MAINTENANCE AND PERMITS

Customer-Generator shall obtain any governmental authorizations and permits required for the construction and operation of the solar-electric generating facility and interconnection facilities and shall maintain all facilities in a safe and prudent manner and in conformance with all applicable laws and regulations including, but not limited to, NPUA*'s* Appendix A.

Customer-Generator shall reimburse NPUA for any and all losses, damages, claims, penalties, or liability it incurs as a result of Customer-Generator's failure to obtain or maintain any governmental authorizations and permits required for construction and operation of Customer-Generator's generating facility.

6. ACCESS TO PREMISES

NPUA may enter Customer-Generator's premises:

(a) to inspect, at all reasonable hours, Customer-Generator's protective devices and read or test meter; and

(b) to disconnect, without notice the interconnection facilities if, in NPUA's opinion, a hazardous condition exists and such immediate action is necessary to protect persons, or NPUA*'s* facilities, or

property of others from damage or interference caused by Customer-Generator's solar-electric facilities, or lack of properly operating protective devices.

7. INDEMNITY AND LIABILITY

7.1 Each party as indemnitor shall defend, hold harmless, and indemnify the other Party and the directors, officers, employees, and agents of such other Party against and from any and all loss, liability, damage, claim, cost, charge, demand, or expense (including any direct, indirect, or consequential loss, liability, damage, claim, cost, charge, demand, or expense, including attor4ney's fees) for injury or death to persons including employees of either Party and damage to property including property of either Party arising out of or in connection with (a) the engineering, design, construction, maintenance, repair, operation, supervision, inspection, testing, protection or ownership of, or (b) the making of replacements, additions, betterments to, or reconstruction of, the indemnitor's facilities; provided, however, Customer-Generator's duty to indemnify NPUA hereunder shall not extend to loss, liability, damage, claim, cost, charge, demand, or expense resulting from interruptions in electrical service to NPUA's customers other than Customer-Generator. This indemnity shall apply notwithstanding the active or passive negligence of the indemnitee. However, neither Party shall be indemnified hereunder for its loss, liability, damage, claim, cost, charge, demand, or expense resulting from its sole negligence or willful misconduct.

7.2 Not withstanding the indemnity of Section 7.1, and except for a Party's willful misconduct or sole negligence, each Party shall be responsible for damage to its facilities resulting from electrical disturbances or faults.

7.3 The provisions of this Section 7 shall not be construed to relieve any insurer of its obligations to pay any insurance claims in accordance with provisions of any valid insurance policy.

7.4 Except as otherwise provided in Section 7.1, neither Party shall be liable to the other Party for consequential damages incurred by that Party.

7.5 If Customer-Generator fails to comply with the insurance provisions of this Agreement, if any, Customer-Generator shall, at its own cost, defend, hold harmless and indemnify NPUA, its directors, officers, employees, agents, assignees, and successors in interest from and against any and all loss, liability, damage, claim, cost, charge, demand, or expense of any kind or nature (including attorneys' fee and other costs of litigation) resulting from the death or injury to any person or damage to any property, including the personnel and property of NPUA, to the extent that NPUA would have been protected had Customer-Generator complied with all such insurance provisions. The inclusion of this Section 7.5 is not intended to create any express or implied right in Customer-Generator to elect not to provide any such required insurance.

8. INSURANCE *(Optional)*

8.1 Customer-Generator shall maintain, during the term of this Agreement Comprehensive Personal Liability Insurance with a combined single limit of not less than one hundred thousand dollars ($100,000) for each occurrence.

8.2 Such insurance required in Section 8.1 shall, by endorsement to the policy or policies, provide for thirty (30) calendar days written notice to NPUA prior to cancellation, termination, alterations, or material change of such insurance.

8.3 NPUA shall have the right to inspect or obtain a copy of the original policy or policies of insurance.

8.4 Customer-Generator shall furnish the required certificates and endorsements to NPUA prior to commencing operation.

8.5 All insurance certificates, endorsements, cancellations, terminations, alterations, and material changes of such insurance shall be issued and submitted to the following:

NPUA - 817 Third Street
Needles, California 92363

9. GOVERNING LAW

This Agreement shall be interpreted, governed, and construed under the laws of the State of California as if executed and to be performed wholly within the State of California.

10. AMENDMENT MODIFICATION OR WAIVER

Any amendments or modifications to this Agreement shall be in writing and agreed to by both Parties, The failure of any Party at any time or times to require performance of any provision hereof shall in no manner affect the right at a later time to enforce the same.

No waiver by any Party of the breach of any term of covenant contained in this Agreement, whether by conduct or otherwise, shall be deemed to be construed as a further or continuing waiver of any such breach or waiver of the breach of any other term or convent unless such waiver is in writing.

11. APPENDIX

The Agreement includes the following appendix, which is attached and incorporated by reference:

Appendix A: NPUA's Photovoltaic Interconnection Standards for Residential Solar Electric Generating Facilities of 10 kW or Less

12. NOTICES

All written Notices shall be directed as follows:

NPUA- 817 Third Street
Needles, California 92363

CUSTOMER-GENERATOR:

Name
Address
City

Customer-Generator's notices to NPUA pursuant to this Section 12 shall reference the PVID Number set forth in Section 1.1

12.1 In the event of an emergency, Customer shall immediately notify NPUA at its 24-hour emergencies number,760-326-5700, of any emergency situation related to the Generating Facility.

13. TERM OF AGREEMENT

This Agreement shall be in effect when signed by the Customer-Generator and NPUA and shall remain in effect thereafter month-to-month unless terminated by either Party on thirty (30) days' prior written notice in accordance with Section 12.

14. ASSIGNMENT PROHIBITED

Customer-Generator understands and agrees that this Agreement is personal to Customer and that Customer-Generator shall not assign or transfer in any way all or any portion of this Agreement to any other person or entity of any kind. Any attempt by Customer-Generator to assign or transfer in any way all or any portion of this Agreement shall be void ab initio.

15. SIGNATURES

IN WITNESS WHEREOF, the Parties hereto have caused two originals of this Agreement to be executed by their duly authorized representatives.

(CUSTOMER-GENERATOR)	NPUA
By: _____	By: _____
Name:	Name
Title:	Title:
Date: _____	Date:_____

NEEDLES PUBLIC UTILITY AUTHORITY
ANNUAL BASE RATE CALCULATION SPREADSHEET - FY 2017/2018

MUST MANUALLY CALCULATE SHEET (F9)

Basic Service Charge for New Rate Year	$29.82
PY Non-Power Carry Forward	$0
Asset Replacement Fund Target	$590,419
Total - Non Power Related Expenses	$5,221,671

Power Supply with Line Losses		**Hydro Allotment/Cust**
Total Power Supply - Sales KWHRs	60,486,000	
Power Supply - Winter Hydro	6,096,633	406
Power Supply - Summer Hydro	15,594,714	742
Power Supply - Total Hydro	21,691,347	
Power Supply - Non Hydro	38,794,653	

Power Supply Expenses		**Cost Per Kwhr**
Total Power Purchased	$2,200,000	$0.0364
Power Supply - Winter Hydro	$123,067	$0.0202
Power Supply - Summer Hydro	$266,553	$0.0171
Power Supply - Non Hydro	$1,810,380	$0.0467

Revenue From Other Than Power Sold	
Basic Service Charge	$1,073,924
Other Revenue	$1,225,940
Total Non-Power Revenue	$2,299,864

Total Expenses		**Cost Per Kwhr**	
Non-Power Related Expenses	$5,221,671		
Total Power Cost	$2,200,000	$0.0364	Use this rate for PCA Annual Base Rate for power purchased.
Total Operating Expense	$7,421,671		

Rate Calculations		**Cost Per Kwhr**	**Bill Rate Per Kwhr**
Rate For Non-Power Related Expenses	$2,721,806	0.0450	
Winter Hydro Sales - (Oct - Feb)	$123,067	0.0202	0.0652
Summer Hydro Sales - (Mar - Sept)	$266,553	0.0171	0.0621
Over Hydro Allotment Sales	$1,810,380	0.0467	0.0917
California Energy Efficiency Program	$200,000		0.0033

Average Avoided Cost
$0.0299