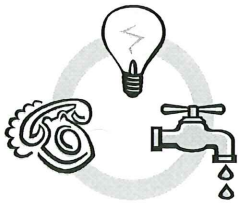
INDUSTRY PUBLIC UTILITIES COMMISSION
CITY OF INDUSTRY

REGULAR MEETING AGENDA
JANUARY 12, 2023, 8:30 A.M.

President Cory C. Moss
Commissioner Michael Greubel
Commissioner Cathy Marcucci
Commissioner Mark D. Radecki
Commissioner Newell W. Ruggles



Location: City Council Chamber, 15651 Mayor Dave Way, City of Industry, California

Addressing the Commission:

NOTICE OF TELEPHONIC MEETING:

- ***Pursuant to AB 361 (Government Code Section 54953(e)), this meeting will be held in person and telephonically. Members of the public can attend the hybrid meeting and offer public comments either in person or telephonically, by calling the following conference call number: 657-204-3264, then entering the following Conference ID: 192 360 670#. Pursuant to the Governor's Executive Order, and in compliance with the Americans with Disabilities Act, if you need special assistance to participate in the IPUC meeting (including assisted listening devices), please contact the City Clerk's Office at (626) 333-2211 by 5:00 p.m. on Tuesday, January 10, 2023, to ensure that reasonable arrangements can be made to provide accessibility to the meeting.***

- ***Agenda Items:*** *Members of the public may address the Industry Public Utilities Commission on any matter listed on the Agenda. In order to conduct a timely meeting, there will be a three-minute time limit per person for any matter listed on the Agenda.*

- ***Public Comments (Non-Agenda Items Only):*** *Anyone wishing to address the IPUC on an item not on the Agenda may do so during the "Public Comments" period. In order to conduct a timely meeting, there will be a three-minute time limit per person for the Public Comments portion of the Agenda. State law prohibits the IPUC from taking action on a specific item unless it appears on the posted Agenda.*

Agendas and other writings:

- *In compliance with Government Code Section 54957.5(b), staff reports and other public records permissible for disclosure related to open session agenda items are available at City Hall, 15625 Mayor Dave Way, City of Industry, California, at the office of the Secretary of the IPUC during regular business hours, Monday through Thursday, 8:00 a.m. to 5:00 p.m., Fridays 8:00 a.m. to 4:00 pm. City Hall doors are closed between 12:00 p.m. to 1:00 p.m. each day. Any person with a question concerning any agenda item may call the City Clerk's Office at (626) 333-2211.*

1. Call to Order

2. Flag Salute

3. Roll Call

4. Public Comments

5. **CONSENT CALENDAR**

All matters listed under the Consent Calendar are considered to be routine and will be enacted by one vote. There will be no separate discussion of these items unless members of the Industry Public Utilities Commission (IPUC) request specific items be removed from the Consent Calendar for separate action.

5.1 Consideration of the Register of Demands for December 22, 2022

RECOMMENDED ACTION: Ratify the Register of Demands

5.2 Consideration of the Register of Demands for January 12, 2023

RECOMMENDED ACTION: Approve the Register of Demands and authorize the appropriate IPUC officials to pay the bills.

5.3 Consideration of Resolution No. IPUC 2023-02 – A RESOLUTION OF THE INDUSTRY PUBLIC UTILITIES COMMISSION CONTINUING THE AUTHORIZATION OF REMOTE TELECONFERENCE MEETINGS PURSUANT TO AB 361

RECOMMENDED ACTION: Adopt Resolution No. IPUC 2023-02.

5.4 Report from the General Manager for the La Puente Valley County Water District regarding the Industry Public Utilities Water Operations

RECOMMENDED ACTION: Receive and file the report.

6. **PUBLIC HEARING**

6.1 Consideration of Resolution No. IPUC 2023-01 - A RESOLUTION OF THE INDUSTRY PUBLIC UTILITIES COMMISSION REVISING THE SCHEDULE OF ELECTRIC RATES AND ELECTRIC SERVICE RULES FOR ELECTRIC SERVICE PROVIDED BY INDUSTRY PUBLIC UTILITIES, PURSUANT TO THE CITY OF INDUSTRY MUNICIPAL CODE SECTION 7.04.060.D., AND ADOPTING A NOTICE OF EXEMPTION REGARDING SAME

RECOMMENDED ACTION: Open the public hearing, take public testimony, and adopt Resolution No. IPUC 2023-01, and Notice of Exemption regarding same.

7. **PUBLIC UTILITIES DIRECTOR COMMENTS**

8. **AB 1234 REPORTS**

9. **COMMISSIONER COMMUNICATIONS**

10. Adjournment. The next regular Industry Public Utilities Commission Meeting is Thursday, February 9, 2023, at 8:30 a.m.

INDUSTRY PUBLIC UTILITIES COMMISSION

ITEM NO. 5.1

INDUSTRY PUBLIC UTILITIES COMMISSION

AUTHORIZATION FOR PAYMENT OF BILLS

Board Meeting December 22, 2022

FUND	DESCRIPTION	DISBURSEMENTS
161	IPUC - ELECTRIC	87,219.47
TOTAL ALL FUNDS		87,219.47

BANK	DESCRIPTION	DISBURSEMENTS
WFBK	IPUC ELECTRIC WELLS FARGO CHK	87,219.47
TOTAL ALL FUNDS		87,219.47

APPROVED PER CITY MANAGER

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Industry Public Utilities Commission
Wells Fargo - Electric
December 22, 2022

Check	Date	Payee Name	Check Amount

IPUCELEC.WF.CHK - IPUC Electric Wells Fargo CHK

11134	12/07/2022	**FRONTIER**		$294.08
	Invoice	Date	Description	Amount
	2023-00000917	11/19/2022	11/19-12/18/22 SVC - EM 21415 BAKER PKWY	$57.28
	2023-00000918	11/19/2022	11/19-12/18/22 SVC - GS 21660 VALLEY BLVD	$61.14
	2023-00000919	11/19/2022	11/19-12/18/22 SVC - EM 21438 BAKER PKWY BLDG 25, WALNUT	$57.28
	2023-00000920	11/22/2022	11/22-12/21/22 SVC - EM 21733 BAKER PKWY BLDG 21	$57.28
	2023-00000921	11/22/2022	11/22-12/21/22 SVC - GS 21858 VALLEY BLVD	$61.10
11135	12/14/2022	**FRONTIER**		$374.20
	Invoice	Date	Description	Amount
	2023-00000957	11/28/2022	11/28-12/27/22 SVC - EM 179 S GRAND AVE	$55.38
	2023-00000958	11/28/2022	11/28-12/27/22 SVC - EM 21700 BAKER PKWY BLDG 23	$71.35
	2023-00000959	11/28/2022	11/28-12/27/22 SVC - EM 21912 GARCIA LN, WALNUT	$102.13
	2023-00000960	11/25/2022	11/25-12/24/22 SVC - EM 21535 BAKER PKWY BLDG 20	$57.28
	2023-00000961	11/25/2022	11/25-12/24/22 SVC - EM 21760 GARCIA LN	$88.06
11136	12/14/2022	**SOUTHERN CALIFORNIA EDISON**		$16,202.27
	Invoice	Date	Description	Amount
	2023-00000962	12/01/2022	11/01-11/30/22 SVC - 208 S WADDINGHAM WAY	$2,975.37
	2023-00000963	12/01/2022	11/01-11/30/22 SVC - 208 S WADDINGHAM WAY	$12,980.81
	2023-00000964	12/01/2022	11/01-11/30/22 SVC - VARIOUS SITES	$246.09
11137	12/22/2022	**ASTRUM UTILITY SERVICES, LLC**		$16,400.00
	Invoice	Date	Description	Amount
	112201	12/01/2022	CONSULTING FOR IPUC - NOV 2022	$16,400.00

Industry Public Utilities Commission
Wells Fargo - Electric
December 22, 2022

Check	Date			Payee Name	Check Amount
IPUCELEC.WF.CHK - IPUC Electric Wells Fargo CHK					
11138	12/22/2022			**COUNTY OF LA - DEPT OF AGRICULTL**	$121.17
	Invoice	Date	Description	Amount	
	230726	10/27/2022	PEST CONTROL - WADDINGHAM POWER PLANT	$121.17	
11139	12/22/2022			**ENCO UTILITY SERVICES**	$10,097.50
	Invoice	Date	Description	Amount	
	INV57087	11/06/2022	CUSTOMER ACCT SVC - NOV 2022	$10,097.50	
11140	12/22/2022			**IPKEYS POWER PARTNERS INC**	$38,750.00
	Invoice	Date	Description	Amount	
	21577	12/07/2022	METER DATA MANAGEMENT SYSTEM	$19,375.00	
	21576	12/07/2022	METER DATA MANAGEMENT SYSTEM	$19,375.00	
11141	12/22/2022			**NV5, INC.**	$4,930.00
	Invoice	Date	Description	Amount	
	302214	11/25/2022	ON-CALL ELEC ENG SVC - OCTOBER 2022	$1,445.00	
	302215	11/25/2022	ON-CALL ELEC ENG SVC - OCTOBER 2022	$3,485.00	
11142	12/22/2022			**UNDERGROUND SERVICE ALERT OF S**	$50.25
	Invoice	Date	Description	Amount	
	1120220162	12/01/2022	DIG ALERTS	$50.25	

Checks	Status	Count	Transaction Amount
	Total	**9**	**$87,219.47**

INDUSTRY PUBLIC UTILITIES COMMISSION

ITEM NO. 5.2
Back-up Material will be delivered prior to Meeting

INDUSTRY PUBLIC UTILITIES COMMISSION
JANUARY 12, 2023

ITEM NO. 5.2

HAND-OUT ITEM

INDUSTRY PUBLIC UTILITIES COMMISSION

AUTHORIZATION FOR PAYMENT OF BILLS

Board Meeting January 12, 2023

FUND	DESCRIPTION	DISBURSEMENTS
122	IPU-ELECTRIC CAPITAL IMPROVEMENT	73,265.82
123	IPU-WATER CAPITAL IMPROVEMENT	17,957.50
161	IPUC ELECTRIC FUND	432,709.76
560	IPUC WATER FUND	19,384.99
TOTAL ALL FUNDS		543,318.07

BANK	DESCRIPTION	DISBURSEMENTS
IPUCELEC.WF	IPUC ELECTRIC WELLS FARGO CKING	505,975.58
IPUC.CHK	IPUC WATER BOFA CKING	37,342.49
TOTAL ALL BANKS		543,318.07

APPROVED PER CITY MANAGER

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Industry Public Utilities Commission
Wells Fargo - Electric
January 12, 2023

Check	Date	Payee Name	Check Amount
IPUCELEC.WF.CHK - IPUC Electric Wells Fargo CHK			
11143	12/21/2022	**FRONTIER**	$3,250.31

Invoice	Date	Description	Amount
2023-00001003	12/01/2022	12/01-12/31/22 SVC - GS 21650 VALLEY BLVD	$57.28
2023-00001004	12/01/2022	12/01-12/31/22 SVC - GS 21700 VALLEY BLVD	$61.10
2023-00001005	12/07/2022	12/07-01/06/23 SVC - GS 408 BREA CYN RD, WALNUT	$33.72
2023-00001006	12/04/2022	12/04-01/03/23 SVC - EM 21858 GARCIA LN, WALNUT	$92.06
2023-00001007	12/04/2022	12/04-01/03/23 SVC - GS 21620 VALLEY BLVD, WALNUT	$61.10
2023-00001008	12/01/2022	11/01-12/31/22 SVC - VARIOUS GENERATOR SITES	$2,945.05

11144	12/22/2022	12/31/2022	**CALPINE ENERGY SOLUTIONS, LLC**	$356,645.74
Invoice	Date	Description		Amount
223550017366995	12/21/2022	WHOLESALE USE - NOV 2022		$356,645.74

11145	01/05/2023	**FRONTIER**	$1,832.18
Invoice	Date	Description	Amount
2023-00001069	12/10/2022	12/10-01/09/23 SVC - EM 21508 BAKER PKWY BLDG 22, WALNUT	$57.28
2023-00001070	12/10/2022	12/10-01/09/23 SVC - GS 21640 VALLEY BLVD	$57.28
2023-00001071	12/10/2022	12/10-01/09/23 SVC - EM 21808 GARCIA LN, WALNUT	$92.06
2023-00001072	12/09/2022	12/09-01/08/23 SVC - EM 208 WADDINGHAM WAY	$890.00
2023-00001073	12/10/2022	12/10-01/09/23 SVC - GS 747 S ANAHEIM-PUENTE RD	$236.00
2023-00001074	12/19/2022	12/19-01/18/23 SVC - EM 21415 BAKER PKWY	$57.28
2023-00001075	12/25/2022	12/25-01/24/23 SVC - EM 21760 GARCIA LN	$120.13
2023-00001076	12/25/2022	12/25-01/24/23 SVC - EM 21535 BAKER PKWY BLDG 20	$85.35
2023-00001077	12/22/2022	12/22-01/21/23 SVC - GS 21858 VALLEY BLVD	$61.10
2023-00001078	12/22/2022	12/22-01/21/23 SVC - EM 21733 BAKER PKWY BLDG 21	$57.28

Industry Public Utilities Commission
Wells Fargo - Electric
January 12, 2023

Check	Date		Payee Name	Check Amount
IPUCELEC.WF.CHK - IPUC Electric Wells Fargo CHK				
	2023-00001079	12/19/2022	12/19-01/18/23 SVC - GS 21660 VALLEY BLVD	$61.14
	2023-00001080	12/19/2022	12/19-01/18/23 SVC - EM 21733 BAKER PKWY BLDG 21	$57.28
11146	01/12/2023		**ASTRUM UTILITY SERVICES, LLC**	$16,400.00
	Invoice	Date	Description	Amount
	122201	01/01/2023	CONSULTING FOR IPUC - DEC 2022	$16,400.00
11147	01/12/2023		**BRAUN BLAISING SMITH WYNNE, P.C.**	$800.00
	Invoice	Date	Description	Amount
	20893	12/19/2022	LEGAL SVC FOR IPUC	$800.00
11148	01/12/2023		**CNC ENGINEERING**	$54,660.00
	Invoice	Date	Description	Amount
	506902	01/03/2023	ELECTRICAL CAPITAL IMPROVEMENTS - INDUSTRY BUSINESS CENTER	$15,990.00
	506903	01/03/2023	AUTOMATIC METER READING	$8,605.00
	506904	01/03/2023	REMOTE MONITORING - WADDINGHAM SUBSTATION	$2,090.00
	506905	01/03/2023	CITY ELECTRICAL FACILITIES	$21,960.00
	506906	01/03/2023	DISTRIBUTION LINE EXTENSION @ 999 HATCHER AVE	$5,750.00
	506907	01/03/2023	UPGRADE SCE INTERCONNECTION @ ANAHEIM-PUENTE SUBSTATION	$265.00
11149	01/12/2023		**COUNTY OF LA - DEPT OF AGRICULTUR**	$121.65
	Invoice	Date	Description	Amount
	230849	11/28/2022	PEST CONTROL - WADDINGHAM POWER PLANT	$121.65
11150	01/12/2023		**NV5, INC.**	$2,465.00

Industry Public Utilities Commission
Wells Fargo - Electric
January 12, 2023

Check	Date	Payee Name	Check Amount

IPUCELEC.WF.CHK - IPUC Electric Wells Fargo CHK

Invoice	Date	Description	Amount
305744	12/15/2022	ON-CALL ELEC ENG SVC - NOV 2022	$1,445.00
305746	12/15/2022	ON-CALL ELEC ENG SVC - NOV 2022	$1,020.00

Check	Date	Payee Name	Check Amount
11151	01/12/2023	SENSUS USA INC.	$58,645.82

Invoice	Date	Description	Amount
ZA22019498	11/21/2022	AUTOMATED METER READING INFRSTRCTRE SYSTM - 208 S WADDINGHAM WAY	$15,250.00
ZA22019807	11/26/2022	AUTOMATED METER READING INFRSTRCTRE SYSTM - 208 S WADDINGHAM WAY	$4,500.00
ZA22018484	11/04/2022	AUTOMATED METER READING INFRSTRCTRE SYSTM - 208 S WADDINGHAM WAY	$6,494.87
ZA22017702	10/25/2022	AUTOMATED METER READING INFRSTRCTRE SYSTM - 208 S WADDINGHAM WAY	$4,500.00
ZA22017182	10/18/2022	AUTOMATED METER READING INFRSTRCTRE SYSTM - 208 S WADDINGHAM WAY	$27,900.95

Check	Date	Payee Name	Check Amount
11152	01/12/2023	SOUTHERN CALIFORNIA EDISON	$11,154.88

Invoice	Date	Description	Amount
7501463533	12/16/2022	11/01-11/30/22 SVC - 208 S WADDINGHAM WAY	$8,266.71
7501463522	12/16/2022	11/01-11/30/22 SVC - 745 ANAHEIM-PUENTE RD	$1,027.46
7501463532	12/16/2022	11/01-11/30/22 SVC - 133 N AZUSA AVE	$1,860.71

Checks	Status	Count	Transaction Amount
	Total	**10**	**$505,975.58**

Industry Public Utilities Commission
Bank of America - Water
January 12, 2023

Check	Date			Payee Name	Check Amount
IPUC.CHK - IPUC Water BofA Checking					
40622	12/14/2022		12/31/2022	**SOUTHERN CALIFORNIA EDISON**	$13,683.26
	Invoice	Date	Description		Amount
	2023-00000968	12/05/2022	10/31-11/30/22 SVC - 1991 WORKMAN MILL U		$13,683.26
40623	01/12/2023			**CNC ENGINEERING**	$18,295.00
	Invoice	Date	Description		Amount
	506908	01/03/2023	4TH AVE & TRAILSIDE WATERLINE IMPROVEMENTS		$7,092.50
	506909	01/03/2023	LOMITAS GENERATOR		$10,865.00
	506910	01/03/2023	CIWS MANAGEMENT & OPERATION - PUENTE BASIN WATERMASTER ISSUES		$337.50
40624	01/12/2023			**INDUSTRY PUBLIC UTILITIES COMMISSI**	$2,000.00
	Invoice	Date	Description		Amount
	JAN-23	12/21/2022	REPLENISH PAYROLL ACCOUNT FOR JANUARY 2023		$2,000.00
40625	01/12/2023			**ROWLAND WATER DISTRICT**	$3,364.23
	Invoice	Date	Description		Amount
	I-06302022-B	06/30/2022	CONTRACT SVC - JUNE 2022		$1,207.98
	I-06302022-D	06/30/2022	CONTRACT SVC - JUNE 2022		$2,156.25

Checks	Status	Count	Transaction Amount
	Total	**4**	**$37,342.49**

INDUSTRY PUBLIC UTILITIES COMMISSION

ITEM NO. 5.3

RESOLUTION NO. IPUC 2023-02

A RESOLUTION OF THE INDUSTRY PUBLIC UTILITIES COMMISSION CONTINUING THE AUTHORIZATION OF REMOTE TELECONFERENCE MEETINGS PURSUANT TO AB 361

RECITALS

WHEREAS, the Industry Public Utilities Commission ("IPUC") is committed to preserving and encouraging public access and participation in its meetings; and

WHEREAS, all meetings of the IPUC are open and public, as required by the Ralph M. Brown Act (Gov. Code §§54950 – 54963) ("Brown Act"), so that any member of the public may attend, participate, and observe the IPUC conduct its business; and

WHEREAS, in March 2020 as a response to the ongoing COVID-19 pandemic, Governor Newsom issued Executive Orders N-25-20 and N-29-20. These orders suspended certain elements of the Brown Act and specifically allowed for legislative bodies as defined by the Brown Act to hold their meetings entirely electronically with no physical meeting place. On June 11, 2021, Governor Newsom issued Executive Order N-08-21, which provided that the provisions in Executive Order N-29-20 suspending certain elements of the Brown Act would continue to apply through September 30, 2021; and

WHEREAS, on September 16, 2021 Governor Newsom signed AB 361, which added subsection (e) to Government Code §54953 of the Brown Act, and makes provision for remote teleconferencing participation in meetings by members of a legislative body, without compliance with the requirements of Government Code §54953(b)(3), subject to the existence of certain conditions; and

WHEREAS, one of the conditions required is that a state of emergency has been declared by the Governor pursuant to Government Code §8625, proclaiming the existence of conditions of disaster or of extreme peril to the safety of persons and property within the state caused by conditions as described in Government Code §8558; and

WHEREAS, it is further required that state or local officials have imposed or recommended measures to promote social distancing, or, the legislative body meeting in person would present imminent risks to the health and safety of attendees; and

WHEREAS, in March 2020, in response to the spread of COVID-19 in the State of California, the Governor Proclaimed a State of Emergency pursuant to Government Code §8625, and issued a number of executive orders aimed at containing the COVID-19 virus, and the County of Los Angeles through various Orders of the Los Angeles County Health Officer, continues to impose or recommend measures to promote social distancing; and

WHEREAS, Los Angeles County officials have recommended measures to promote social distancing, and strongly recommend masks for all regardless of vaccination status in an effort to slow the transmission of COVID-19 throughout the State and Los Angeles County; and

WHEREAS, the IPUC is concerned about the health and safety of all individuals of the public who attend public meetings; and

WHEREAS, as a consequence of the continued state of emergency, the IPUC Board adopted Resolution No. IPUC 2021-08 on October 14, 2021, Resolution No. IPUC 2021-09 on November 13, 2021, Resolution No. IPUC 2021-10 on December 13, 2021, Resolution No. IPUC 2022-01 on January 12, 2022, Resolution No. IPUC 2022-02 on February 11, 2022, Resolution No. IPUC 2022-05 on March 13, 2022, Resolution No. IPUC 2022-08 on April 12, 2022, Resolution No. IPUC 2022-09 on May 12, 2022, Resolution No. IPUC 2022-12 on June 11, 2022, Resolution No. IPUC 2022-14 on July 11, 2022, Resolution No. IPUC 2022-15 on August 10, 2022, Resolution No. IPUC 2022-18 on September 9, 2022, Resolution No. IPUC 2022-20 on October 9, 2022, Resolution No. IPUC 2022-22 on November 8, 2022, and Resolution No. IPUC 2022-23 on December 8, 2022, finding and determining that the IPUC would continue to conduct its meetings without compliance with Government Code §54953(b)(3), as authorized by Government Code §54953(e), and that the IPUC would continue to comply with the requirements to provide the public with access to all public meetings as prescribed in §54953(e)(2); and

WHEREAS, pursuant to the provisions of AB 361, the IPUC Board hereby finds and determines that the findings set forth in Resolution No. IPUC 2022-23 remain, and that it is thereby necessary to continue to conduct its meetings without compliance with Government Code §54953(b)(3), as authorized by Government Code §54953(e).

NOW, THEREFORE, THE INDUSTRY PUBLIC UTILITIES COMMISSION DOES HEREBY FIND, DETERMINE AND RESOLVE AS FOLLOWS:

SECTION 1: All of the facts set forth in the Recitals are true and correct, and are incorporated herein by reference.

SECTION 2: The IPUC hereby considers the existing conditions of the state of emergency, local officials in Los Angeles County have recommended or imposed measures to promote social distancing in connection with COVID-19. Based on these facts, findings, and determinations, the IPUC authorizes staff to conduct remote teleconference meetings of the IPUC, under the provisions of Government Code §54953(e).

SECTION 3: The Public Utilities Director is hereby authorized and directed to take all actions necessary to carry out the intent and purpose of this Resolution and AB 361, including continuing to conduct open and public meetings in accordance with the Brown Act.

SECTION 4: This Resolution shall take effect January 7, 2023, and shall be effective until the earlier of February 6, 2023, or such time as the Industry Public Utilities Commission adopts a subsequent resolution in accordance with Government Code §54953(e)(3) to extend the time during which the IPUC may continue to meet by teleconference.

PASSED, APPROVED AND ADOPTED by the Industry Public Utilities Commission at a regular meeting held on January 12, 2023, by the following vote:

AYES:	COMMISSIONER:
NOES:	COMMISSIONER:
ABSTAIN:	COMMISSIONER:
ABSENT:	COMMISSIONER:

_____
Cory C. Moss, President

ATTEST:

_____
Julie Gutierrez-Robles, Secretary

INDUSTRY PUBLIC UTILITIES COMMISSION

ITEM NO. 5.4

Verbal Presentation

INDUSTRY PUBLIC UTILITIES COMMISSION

ITEM NO. 6.1

INDUSTRY PUBLIC UTILITIES COMMISSION

MEMORANDUM

TO:	Honorable President and Commissioners
FROM:	Joshua Nelson, Public Utilities Director JN
STAFF:	Mathew Hudson, Engineering Manager; Dev Birla, Operations Manager, CNC Engineering
DATE:	01/12/2023
SUBJECT:	CONSIDERATION OF RESOLUTION NO. IPUC 2023-01 - A RESOLUTION OF THE INDUSTRY PUBLIC UTILITIES COMMISSION REVISING THE SCHEDULE OF ELECTRIC RATES AND ELECTRIC SERVICE RULES FOR ELECTRIC SERVICE PROVIDED BY INDUSTRY PUBLIC UTILITIES, PURSUANT TO THE CITY OF INDUSTRY MUNICIPAL CODE SECTION 7.04.060.D., AND ADOPTING A NOTICE OF EXEMPTION REGARDING SAME

BACKGROUND

Net energy metering allows customers to generate their own renewable energy such as solar and wind ("Customer-Generators") to serve their energy needs directly on site and to receive a financial credit on their electric bills for any surplus energy. Net energy metering allows customers to reduce their monthly electric bill from the utility.

Consistent with the statutory requirements of Public Utilities Code Section 2827, publicly owned electric utilities must offer a standard Net Energy Metering ("NEM") Rate Schedule to customers that install renewable generation under one megawatt in capacity that does not exceed the customer's historical annual usage and meets all the applicable safety and performance standards and program requirements ("Eligible Customer-Generators"). There is an open enrollment up to a program cap of 387 kW for Eligible Customer-Generators that have received an approved NEM and Generating Facility Interconnection Agreement (NEM 1.0). This program cap of 387 kW is set at 5 percent of Industry Public Utilities' ("IPU") maximum coincident peak demand during the prior fiscal year, called the "NEM Capacity Value." The NEM Capacity Value will be adjusted annually based upon 5 percent of IPU's maximum coincident peak demand during the prior fiscal year. Under NEM 1.0, during any billing cycle, if an Eligible Customer-Generator supplies IPU with more energy than the Eligible Customer-Generator consumes, the net energy produced will be carried forward in kilowatt-hours (kWh) on the electric portion of their bill and will be valued at the rate applicable at the time the energy was generated. If an Eligible Customer-Generator generates more energy than the customer consumes over an entire twelve-month period ("net surplus energy"), then at the end of that twelve-month period, the Eligible Customer-Generator is eligible to receive compensation for the net surplus energy. This compensation is calculated by multiplying the amount of net surplus energy by the Net Surplus Compensation Rate ("NSCR"), which is set forth in NEM 1.0 Rate Schedule.

The NSCR will be adjusted September 1 of each year to reflect IPU's prior fiscal year costs and will be posted on IPU's website. The NSCR will include: (i) IPU's annual weighted average cost of energy purchased from the California Independent System Operator ("CAISO"); (ii) IPU's annual weighted average CAISO Wheeling Access Charge; and (iii) the value of renewable energy credits based on IPU's most recently executed renewable power purchase contractual commitment of ten years or more.

Once the NEM Capacity Value is reached, any new customer that would qualify as an Eligible

Customer-Generator ("ERG Customer") will be served using IPU's ERG Rate Schedule and must execute the IPU Interconnection and Renewable Generation Agreement ("ERG Agreement"). Energy delivered from IPU to and consumed by an ERG Customer will be measured by the "delivered" register on the electric meter. The monthly kWh delivered to and consumed by the ERG Customer will be billed monthly on the otherwise applicable rates. The renewable generation that is generated by an ERG Customer and delivered to the electric grid will be measured by the "received" register on the electric meter. Each month, the total quantity of renewable generation that is generated by and delivered to the electric grid shall be multiplied by the applicable ERG Rate Schedule, and that amount will be credited towards the monthly bill. If the amount credited exceeds the total amount of the monthly bill, then that excess amount shall be carried forward to next month's bill.

The ERG Rate Schedule will be adjusted September 1 of each year to reflect IPU's prior fiscal year costs and will be posted on IPU's website. The ERG Rate Schedule will include: (i) IPU's annual weighted average cost of energy purchased from the California Independent System Operator ("CAISO"); (ii) IPU's annual weighted average CAISO Wheeling Access Charge; and (iii) value of renewable energy credits based on IPU's most recently executed renewable power purchase contractual commitment of ten years or more.

The NSCR and ERG Rate is $0.07668 until September 1, 2023.

DISCUSSION

The statutory requirements of Public Utilities Code Section 2827 require that the tariff made available to Eligible Customer-Generators be based on the just and reasonable compensation for the value of net surplus electricity, while leaving other rate payers unaffected. IPU's NEM 1.0 and ERG Rate Schedules, described above, meet that requirement.

IPU customers have recently expressed an interest in installing on-site renewable generation. To meet the statutory requirements of Public Utilities Code Section 2827, the Schedule of Rates and Electric Service Rules will be revised to include a Net Energy Metering 1.0 Rate Schedule and ERG Rate Schedule, Net Energy Metering Agreement, Eligible Renewable Generation Agreement, and other related documents to be signed by the customer ("Electric Service Rule 21") to assure all the applicable safety and performance standards and program requirements are met.

IPU provided the required notification to the public by publishing notice of this hearing on September 28, 2022, and republished on October 5, 2022, in the San Gabriel Tribune, a newspaper of general circulation adjudicated to publish legal advertisements for the City of Industry. Public Hearing was opened for public comments on October 13, 2022 and continued to January 12, 2023. Public Hearing Notice was again published in the San Gabriel Tribune on December 14, 2022, and republished on December 21, 2022 and the public notice was posted at City Hall and on the IPU Website.

Environmental Review:

The proposed rate revisions were reviewed pursuant to the requirements of the California Environmental Quality Act ("CEQA"), and determined that the adoption of the revised Schedule of Rates is exempt from CEQA, under the commonsense exemption set forth in Section 15061 of the CEQA Guidelines, because the revised Schedule of Rates has no foreseeable potential to result in a significant impact on the environment. Further, the adoption of the Schedule of Rates is exempt from CEQA pursuant to Section 15273 of the CEQA Guidelines because such revisions are for the purpose of meeting the operating expenses of the municipal electricity enterprise. Therefore, Staff recommends that the IPUC adopt a notice of exemption for the proposed revisions.

FISCAL IMPACT

Although the fiscal impact of establishing the Net Energy Metering tariff schedule is dependent upon the total size of on-site customer generation and cannot be quantified, if the proposed Resolution No. IPUC 2023-01 is approved and customers install on-site generation, IPU's revenues will be reduced for NEM 1.0 Eligible Customer-Generators and Eligible Renewable Generation ("ERG') Customers.

RECOMMENDATION

1. Conduct a public hearing, receive testimony, and close the public hearing; and
2. Adopt Resolution No. IPUC 2023-01 amending and revising the IPU Electric Rate Schedules and Electric Service Rules, effective February 1, 2023; and
3. Adopt Notice of Exemption regarding same.

Attachments

A. Resolution No. IPUC 2023-01
B. Attachment A to Resolution No. IPUC 2023-01 - Schedule of Rates
C. Notice of Public Hearing
D. IPU Interconnection and Net Energy Metering Agreement
E. IPU Interconnection and Eligible Renewable Generation Agreement
F. IPU Rule 21
G. IPU Generation Interconnection Standards and Guidelines
H. Notice of Exemption

RESOLUTION NO. IPUC 2023-01

A RESOLUTION OF THE INDUSTRY PUBLIC UTILITIES COMMISSION REVISING THE SCHEDULE OF ELECTRIC RATES FOR ELECTRIC SERVICE PROVIDED BY INDUSTRY PUBLIC UTILITIES, PURSUANT TO THE CITY OF INDUSTRY MUNICIPAL CODE SECTION 7.04.060.D., AND ADOPTING A NOTICE OF EXEMPTION REGARDING SAME

WHEREAS, net energy metering allows customers to generate their own renewable energy such as solar and wind to serve their energy needs directly on site and to receive a financial credit on their electric bills for any surplus energy, thereby allowing customers to reduce their monthly electric bill; and

WHEREAS, Public Utilities Code Section 2827 requires publicly owned electric utilities to offer a standard Net Energy Metering ("NEM") Tariff Schedule to customers that install renewable generation under one megawatt in capacity that does not exceed the customer's annual usage and meets all the applicable safety and performance standards and program requirements ("Eligible Customer-Generators"); and

WHEREAS, Industry Public Utilities ("IPU") will have an initial open enrollment up to a program cap of 387 kilowatts ("kW") for Eligible Customer-Generators that have received an approved NEM and Generating Facility Interconnection Agreement (NEM 1.0); and

WHEREAS, this program cap of 387 kW is set at 5 percent of IPU's maximum coincident peak demand in the prior fiscal year, called the "NEM Capacity Value"; and

WHEREAS, IPU's NEM Capacity Value will be adjusted annually based upon 5 percent of IPU's maximum coincident peak demand during the prior fiscal year; and

WHEREAS, under NEM 1.0, during any billing cycle, if an Eligible Customer-Generator supplies IPU with more energy than the Eligible Customer-Generator consumes, the net energy produced will be carried forward in kilowatt-hours ("kWh") on the electric portion of their bill and will be valued at the rate applicable at the time the energy was generated. At the end of each twelve-month period, the Eligible Customer-Generator can receive net surplus energy compensation for net surplus energy generated during the prior twelve-month period times the Net Surplus Compensation Rate ("NSCR") set forth in NEM 1.0 Rate Schedule; and

WHEREAS, the NSCR will be adjusted September 1 of each year to reflect IPU's prior fiscal year costs and will be posted on IPU's website. The NSCR will include: (i) IPU's annual weighted average cost of energy purchased from the California Independent System Operator ("CAISO"); (ii) IPU's annual weighted average CAISO Wheeling Access Charge; and (iii) value of renewable energy credits based on IPU's

most recently executed renewable power purchase contractual commitment of ten years or more; and

WHEREAS, once the NEM Capacity Value is reached, any new Eligible Customer-Generator will be served using IPU's ERG Rate Schedule and the IPU Interconnection and Eligible Renewable Generation Agreement ("ERG Agreement"); energy delivered from IPU to and consumed by ERG Customer will be measured by the "delivered" register on the electric meter; the monthly kWh delivered, and consumed electricity shall be billed monthly on the otherwise applicable rates; the renewable generation that is generated by ERG Customer and delivered to the electric grid will be measured by the "received" register on the electric meter; each month, the total quantity of renewable generation that is generated by and delivered to the electric grid is multiplied by the applicable ERG Rate Schedule, and that amount credited towards the monthly bill; if the amount credited to exceeds the total amount of the monthly bill, then that excess amount will be carried forward to next month's bill; and

WHEREAS, the ERG Rate Schedule will be adjusted September 1st of each year to reflect IPU's prior fiscal year costs and will be posted on IPU's website; the ERG Rate Schedule will include: (i) IPU's annual weighted average cost of energy purchased from the California Independent System Operator ("CAISO"); (ii) IPU's annual weighted average CAISO Wheeling Access Charge; and (iii) value of renewable energy credits based on IPU's most recently executed renewable power purchase contractual commitment of ten years or more; and

WHEREAS, the NSCR and ERG Rate is $0.07668 per kWh; and is valid until September 1, 2023 and

WHEREAS, the statutory requirements of Public Utilities Code Section 2827 require that the tariff made available to Eligible Customer-Generators is based on the just and reasonable compensation for the value of net surplus electricity, while leaving other rate payers unaffected; and IPU's NEM 1.0 and ERG Rate Schedules, described above, meet that requirement; and

WHEREAS, to meet the statutory requirements of Public Utilities Code Section 2827, the Schedule of Rates and Electric Service Rules should be revised to include a Net Energy Metering 1.0 Rate Schedule and ERG Rate Schedule, Net Energy Metering Agreement, Eligible Renewable Generation Agreement, and other related documents to be signed by the customer ("Electric Service Rule 21") to assure all the applicable safety and performance standards and program requirements are met; and

WHEREAS, IPU provided the required notification to the public by publishing notice of this hearing on September 28, 2022, and republished on October 5, 2022, in the San Gabriel Tribune, a newspaper of general circulation adjudicated to publish legal advertisements for the City of Industry. Public Hearing was opened for public comments

on October 13, 2022 and continued to January 12, 2023. Public Hearing Notice was again published in the San Gabriel Tribune on December 14, 2022, and republished on December 21, 2022 and the public notice was posted at City Hall and on the IPU Website.

WHEREAS, based upon the Staff Report, testimony, and other evidence submitted at the public hearing held on January 12, 2023, the IPUC hereby finds and determines that: the proposed revised charges and rates set forth in, attached hereto and incorporated herein by reference, reflect the IPU's reasonable and prudent costs associated with operation of IPU and do not establish unfair, unreasonable, discriminatory or excessive rates that exceed the IPU's reasonable costs of providing electricity services to its customers; and

WHEREAS, the IPUC reviewed the adoption of this Resolution pursuant to the requirements of the California Environmental Quality Act of 1970, as amended ("CEQA"), and determined that the adoption of the revised Schedule of Rates has no foreseeable potential to result in a significant impact upon the environment and is exempt from CEQA pursuant to. Further, the IPUC has determined that the approval of the fees and rates is exempt from CEQA under Section 15273(a)(1) of the State CEQA Guidelines as such fees and rates are for the purposes of meeting the operating expenses of the municipal electricity enterprise; and

WHEREAS, all legal prerequisites to the adoption of this Resolution have occurred.

NOW THEREFORE, THE INDUSTRY PUBLIC UTILITIES COMMISSION HEREBY FINDS, DETERMINES, AND RESOLVES AS FOLLOWS:

SECTION 1. The IPUC hereby determines that all the facts set forth in the recitals above are true and correct, and are incorporated herein by reference.

SECTION 2. The IPUC has reviewed the proposed rate revisions pursuant to the requirements of the California Environmental Quality Act ("CEQA"), and determined that the adoption of the revised Schedule of Rates is exempt from CEQA, under the commonsense exemption set forth in Section 15061 of the CEQA Guidelines because the revised Schedule of Rates has no foreseeable potential to result in a significant impact upon the environment. Further, the adoption of the Schedule of Rates is exempt from CEQA pursuant to Section 15273 of the CEQA Guidelines because such fees and rates are for the purposes of meeting the operating expenses of the municipal electricity enterprise. Based on the foregoing, the City Council hereby adopts the Notice of Exemption, and directs Staff to file same as required by law.

SECTION 3. The Schedule of Rates for electricity service, as set forth in the Schedule of Rates set forth in Attachment A to Resolution No. 2022-16 is hereby rescinded in its entirety as of February 1, 2023. The Schedule of Rates set forth in

Attachment A to this Resolution is hereby adopted, and shall take effect on February 1, 2023.

SECTION 5. The Secretary shall certify to the adoption of this Resolution and the same shall be in full force and effect.

PASSED, APPROVED AND ADOPTED by the Industry Public Utilities Commission at a regular meeting held on January 12, 2023, by the following vote:

AYES: COMMISSIONER:

NOES: COMMISSIONER:

ABSENT: COMMISSIONER:

ABSTAIN: COMMISSIONER:

_____
Cory C. Moss, President

ATTEST:

_____
Julie Gutierrez-Robles, Secretary

Attachment A

Industry Public Utilities

Schedule of Electric Rates

Schedule A
General Service

A. Applicability.

Applicable to single and three-phase General Service including lighting and Power Service. Any Customer whose monthly Maximum Demand, in the opinion of IPU, is expected to exceed 20 kW or has exceeded 20 kW in any three (3) months during the preceding twelve (12) months is ineligible for service under this Rate Schedule. Effective with the date of ineligibility, the Customer's account shall be transferred to another applicable Rate Schedule.

B. Rates.

Customer Charge - $/Meter/Day	$ 0.412
Energy Charge - $/kWh/Meter/Month	
Summer Season	$ 0.18416
Winter Season	0.12883
Public Purpose Programs - $/kWh/Meter/Month	$ 0.00444

C. Billing Calculation.

A Customer's bill is calculated according to the rates and conditions above. The charges are calculated by applying the Rate Charges when applicable to the actual billing determinants (kilowatt hours [kWh], etc.).

Schedule B
Large General Service

A. Applicability.

Applicable to single and three-phase service including lighting and Power Service Customers whose monthly Maximum Demand registers, or in the opinion of IPU is expected to register, above 20 kW and below 500 kW. Any Customer whose monthly Maximum Demand, in the opinion of the Utility, is expected to reach 500 kW or has reached 500 kW for any three (3) months during the preceding twelve (12) months is ineligible for service under this Rate Schedule. Effective with the date of ineligibility, such Customer's account shall be transferred to another applicable Rate Schedule. Any Customer whose monthly Maximum Demand has registered 20 kW or less for twelve (12) consecutive months is eligible for service under another applicable Rate Schedule.

B. Rates.

Customer Charge - $/Meter/Month	$ 56.77
Energy Charge - $/kWh/Meter/Month	
For the first 300 kWh/kW of Maximum Demand	$ 0.11808
All kWh above the first 300 kWh/kW	0.13328
Demand Charge - $/kW of Billing Demand/Meter/Month	
Facilities Related	$ 5.34
Time Related - Summer Season – On-Peak	7.65
Public Purpose Programs - $/kWh/Meter/Month	$ 0.00424

C. Maximum Demand.

The Maximum Demand in any month shall be the measured maximum average kilowatt input, indicated or recorded by instruments, during any 15-minute metered interval in the month.

D. Billing Demand.

The Billing Demand shall be the kW of Maximum Demand. The Time Related Summer Season Demand component shall be for the kW of Maximum Demand recorded for the Summer Season monthly billing period. The Facilities Related Demand component shall be for the kW of Maximum Demand recorded during (or established for) the monthly billing period. However, when IPU

determines the customer's meter will record little or no energy use for extended periods of time or when the customer's meter has not recorded a Maximum Demand in the preceding eleven months, the Facilities Related Component of the Demand Charge may be established at 50 percent of the customer's connected load.

E. Billing Calculation.

A Customer's bill is calculated according to the rates and conditions above. The charges are calculated by applying the Rate Charges when applicable to the actual billing determinants (kilowatt hours [kWh], etc.).

Schedule C
Larger General Service

A. Applicability.

Applicable to single and three-phase service including lighting and power customers whose monthly Maximum Demand registers, or in the opinion of IPU is expected to exceed 500 kW or has exceeded 500 kW for any three (3) months during the preceding twelve (12) months. Any Customer whose monthly Maximum Demand has registered below 500 kW for twelve (12) consecutive months is ineligible for service under this Rate Schedule, and shall be transferred to another applicable Rate Schedule

B. Rates.

Customer Charge - $/Meter/Month	$ 46.66
Energy Charge - $/kWh/Meter/Month	
For the first 300 kWh/kW of Maximum Demand	$ 0.09704
All kWh above the first 300 kWh/kW	0.10954
Demand Charge - $/kW of Billing Demand/Meter/Month	
Facilities Related	$ 4.39
Time Related - Summer Season – On-Peak	6.29
Public Purpose Programs - $/kWh/Meter/Month	$ 0.00343

C. Maximum Demand.

The Maximum Demand in any month shall be the measured maximum average kilowatt input, indicated or recorded by instruments, during any 15-minute metered interval in the month.

D. Billing Demand.

The Billing Demand shall be the kW of Maximum Demand. When applicable, the Time Related Summer Season Demand component shall be for the kW of Maximum Demand recorded for the Summer Season monthly billing period. The Facilities Related Demand component shall be for the kW of Maximum Demand recorded during (or established for) the monthly billing period. However, when IPU determines the customer's meter will record little or no energy use for extended periods of time or when the customer's meter has not recorded a Maximum Demand in the preceding eleven months, the Facilities Related Component of the Demand Charge may be established at 50 percent of the customer's connected load.

E. Billing Calculation.

A Customer's bill is calculated according to the rates and conditions above. The charges are calculated by applying the Rate Charges when applicable to the actual billing determinants (kilowatt hours [kWh], etc.).

Schedule D
Domestic Service

A. Applicability.

Applicable to domestic service including lighting, heating, cooking, and power or combination thereof in a Single-Family Residence or an individually metered Single-Family Dwelling in a Multi-Family Residence.

B. Rates.

Customer Charge - $/Meter/Day	
Single-Family Residence	$0.033
Multi-Family Residence	$0.025
Energy Charge - $/kWh/Meter/Month	$ 0.10882
Public Purpose Programs - $/kWh/Meter/Month	$ 0.00328

C. Customer Charge: For purposes of applying the Customer Charge, the following definitions shall be used:

- Single-Family Residence: A building of single occupancy which does not share common walls, floors, or ceilings with other residential dwellings units.
- Multi-Family Residence - Apartments, mobile homes, condominiums, townhouses, or a building of multiple occupancy which shares common walls and/or floors and ceilings with other residential units.

D. Billing Calculation.

A Customer's bill is calculated according to the rates and conditions above. The charges are calculated by applying the Rate Charges when applicable to the actual billing determinants (kilowatt hours [kWh], etc.).

Schedule NEM 1.0
Net Energy Metering

A. Applicability

This schedule is available to Eligible Customer-Generators, as defined in Section 2827 of the California Public Utilities Code, operating a Renewable Electrical Generation Facility, located on the customer's owned, leased, or rented premises with a capacity of no more than one megawatt that is intended primarily to offset part or all of the customer's own electrical requirements and which is interconnected and operates in parallel with IPU's power system pursuant to an Interconnection and Metering Agreement (NEM Agreement) with IPU. To be eligible for this Rate Schedule, the expected annual generation from the Renewable Electrical Generation Facility must not exceed the Customer's load (on a kWh basis) for the prior full calendar year, or if insufficient historical load data is available, the expected annual load based on the customer type and characteristics.

This Rate Schedule is available on a first-come, first-served basis until the total rated generating capacity used by Eligible Customer-Generators exceeds 5 percent of IPU's aggregate customer peak demand. The total amount of Eligible Customer-Generation connected to IPU's distribution system and served under this Rate Schedule at any time is defined as the NEM Capacity. The total amount of Renewable Electrical Generation Facility that is eligible for service under this Rate Schedule is 387 kilo-watts ("NEM Capacity Value)" and it is determined using the aggregate customer peak demand, defined by IPU as the maximum coincident peak MW reading during the same one-hour interval for the fiscal year (Annual Peak Demand). IPU's NEM Capacity and NEM Capacity Value are reviewed annually and the NEM Capacity Value is adjusted using the following methodology with the result rounded up to the nearest 0.1 MW:

NEM Capacity Value = APD_{avg} * 0.05

Where: APD= Annual Peak Demand for the Fiscal Year
APD_{avg} = The rolling five-year average of the APD in MW

Current NEM Capacity Value is 387 kW

B. Protocol for Administering the NEM Capacity

1. Eligible Customer-Generators will be served under this Rate Schedule until the total installed NEM Capacity equals the NEM Capacity Value. Once the NEM Capacity Value has been reached, new customer generation will be served using IPU's ERG Rate Schedule. Should the capacity of a proposed project be anticipated to result in IPU exceeding the NEM Capacity Value, the proposed project will not be eligible for service under this Rate Schedule.

2. Once a customer is eligible to be served under this Rate Schedule, they will remain eligible, unless the IPU revises eligibility criteria or the customer elects service under the ERG Schedule.

3. As NEM Capacity becomes available, those existing eligible renewable customer generators that are served under the ERG Rate Schedule, and would like to elect service under this Rate Schedule, shall notify IPU of their interest. Upon notification IPU will evaluate the interested customer for eligibility under this Rate Schedule based on the capacity of their generator and the installation service date, with the oldest installations receiving first consideration. More specifically:

    a. Only customers with a renewable generator capacity that is less than or equal to the available NEM Capacity shall be considered for service under this Rate Schedule.

    b. Those customers meeting the generator capacity requirement will be offered service under this Rate Schedule in chronological order based on the service date of their generation.

4. New or expanded eligible renewable customer generators will be considered on a first-come, first-served basis for service under this Rate Schedule for any remaining NEM Capacity. New customer generation will be served until the NEM Capacity Value is reached. When the capacity of a proposed project is anticipated to cause IPU to exceed the NEM Capacity, the proposed project will not be eligible for service under this Rate Schedule.

C. Territory

Within the entire service territory served.

D. Rates

All rates charged will be in accordance with the Eligible Customer-Generator's otherwise applicable rate schedule on a Net Energy Metering basis. An Eligible Customer-Generator served under this schedule is responsible for all charges in its otherwise applicable rate schedule, including the Customer Charge, when applicable, regardless of the Customer's monthly or annual net generation.

Eligible Customer-Generators under this Rate Schedule are subject to any new or additional charges pursuant to the Customer's otherwise applicable rate schedule.

E. Special Conditions

1. Definitions.

Renewable Electrical Generation Facility: a facility that generates electricity from a renewable source listed in paragraph (1) of subdivision (a) of Section 25741 of the California Public Resources Code including biomass, solar thermal, photovoltaic, wind, geothermal, fuel cells using renewable fuels, small hydroelectric generation, digester gas, municipal solid waste conversion, landfill gas, ocean wave, ocean thermal, or tidal current, and any additions or enhancements to the facility using that technology.

Net Energy Metering: measuring the difference between the energy supplied through the electric grid to the Customer and the energy generated by an Eligible Customer-Generator and fed back to the electric grid over a twelve-month period, as described in subdivisions (c) and (h) of California Public Utilities Code Section 2827.

Net Surplus Customer-Generator: An Eligible Customer-Generator that generates more energy in a twelve-month period than is supplied by the Utility to the Eligible Customer-Generator during the same twelve-month period.

Net Surplus Energy: All energy generated by an Eligible Customer-Generator measured in kilowatt-hours over a twelve-month period that exceeds the amount of energy consumed by that Eligible Customer-Generator.

Net Surplus Energy Compensation: Compensation, either monetary or as a billing credit, at a per kilowatt-hour rate, offered by IPU to the Net Surplus Customer-Generator for Net Surplus Energy. The currently applicable NSCR shall be posted to IPU's website.

2. Agreement.

In order for this schedule to apply, Customer must complete and sign the IPU Interconnection and Net Metering Agreement. This agreement contains additional terms and conditions, including without limitation, requirements relating to indemnification, insurance, and access to Customer's premises.

3. Meter Requirements.

IPU shall own, operate, and maintain a single meter on Customer's premises capable of registering the flow of electricity in two directions.

If the existing meter on Customer's premises is not capable of measuring the flow of electricity in two directions or supplying time-of-use information, Customer shall be responsible for the expenses involved in the purchase and installation of the meter.

IPU, at its expense, may install additional meters. However, if such meters are installed, the Net Energy Metering calculation shall yield an identical result to that of a single meter.

4. Billing.

Customer's Net Energy Metering calculation shall be calculated over each normal monthly billing period within a 12-month period. The monthly Net Energy Metering calculation shall be made by measuring the difference between the electricity supplied to Customer and the electricity generated by Customer and fed back to the grid over a normal one-month billing period.

At the end of each one-month billing period, IPU shall determine if Customer was a net consumer or a net producer of electricity.

In the event that the electricity supplied by IPU during the one-month billing period exceeds the electricity generated by Customer during the same period, Customer is a net energy consumer. If Customer was a net energy consumer, IPU 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.

In the event that the electricity supplied by IPU during the one-month billing period is less than the electricity generated by Customer during the same period, Customer is a net energy producer. If Customer is a net energy producer, any excess energy generated by the customer shall be carried forward to the following billing cycle as a monetary credit on the customer's account until the end of the 12-month period.

If Customer terminates service prior to the end of any 12-month period, IPU shall reconcile Customer's consumption and production of electricity and bill Customer for Net Energy Metering charges, or if appropriate, issue a final payment for any excess generation, based on the applicable Net Surplus Compensation rate.

5. Net Surplus Compensation.

If at the end of the applicable 12-month period, Customer is a Net Surplus Customer-Generator, then IPU shall retain any Net Surplus Energy generated by Customer, including any associated environmental attributes or renewable energy credits (REC), and Customer's monetary value shall be reset to zero for the subsequent 12-month period.

If Customer is eligible for Net Surplus Energy Compensation, such compensation shall be calculated over the 12-month period.

In order to be eligible for Net Surplus Energy Compensation, Customer must: (1) elect a compensation option in Customer's NEM Agreement; (2) certify that

Customer has sole ownership of the environmental attributes and RECs associated with the energy generated from the Generating Facility; and (3) agree to transfer to IPU all rights, title, and interest Customer has to such environmental attributes and RECs.

IPU's Net Surplus Compensation rate shall provide just and reasonable compensation for the value of the Net Surplus Energy, while leaving other ratepayers unaffected.

If Customer is eligible for Net Surplus Energy Compensation, Customer shall receive compensation pursuant to the method selected in Customer's NEM Agreement.

6. Termination of Service

If Customer terminates service prior to the end of any 12-month period, IPU shall reconcile Customer's consumption and production of electricity over the time period from the end of the prior 12 month period until the date of termination. If at the end of the period prior to termination, Customer is a Net Surplus Customer-Generator, then IPU shall retain any Net Surplus Energy generated by Customer, including any associated environmental attributes or RECs. If Customer is eligible for Net Surplus Compensation, such compensation shall be calculated as measured from the end of the prior 12 month period until the date of termination.

7. Net Surplus Compensation Rate (NSCR).

The Net Surplus Compensation Rate (NSCR) shall be adjusted September 1 of each year to reflect the Utility's prior fiscal year costs and will be posted on the Utility's website. If the NSCR is not adjusted or otherwise updated for any individual year, the most recently effective NSCR shall apply. The NSCR will include: (i) the Utility's annual applicable weighted average cost of energy purchased from the California Independent System Operator (CAISO); (ii) the Utility's annual weighted average CAISO Wheeling Access Charge; and (iii) value of renewable energy credits based on the Utility's most recently executed renewable power purchase contractual commitment of ten years or more. The currently applicable NSCR shall be posted to IPU's website.

Schedule ERG
Eligible Renewable Generation

A. Applicability

This schedule is available to Eligible Customer-Generators, as defined in Section 2827 of the California Public Utilities Code, operating a Renewable Electrical Generation Facility, located on the customer's owned, leased, or rented premises with a capacity of no more than one megawatt that is intended primarily to offset part or all of the customer's own electrical requirements and which is interconnected and operates in parallel with IPU's power system pursuant to an Interconnection and Metering Agreement (ERG Agreement) with IPU. To be eligible for this Rate Schedule, the expected annual generation from the Renewable Electrical Generation Facility must not exceed the customer's load (on a kWh basis) for the prior full calendar year, or if insufficient historical load data is available, the expected annual load based on the customer type and characteristics.

B. Territory

Within the entire service territory served.

C. Rates

a. Customer charges, demand charges, and other fees.

The applicable customer charges, demand charges, and other fees shall be billed monthly according to the ERG Customer's otherwise applicable rate schedule. ERG Customers under this Rate Schedule are subject to any new or additional charges pursuant to the Customer's otherwise applicable rate schedule.

b. Electricity delivered to and consumed by ERG Customer.

The electricity delivered from IPU and consumed by the ERG Customer will be measured by the "Delivered" register on the energy meter. The monthly kWh delivered and consumed electricity shall be billed monthly on the ERG customer's otherwise applicable rate.

c. Electricity generated by ERG Customer and delivered to the grid.

The renewable generation that is generated by the ERG Customer and delivered to the grid will be measured by the "Received" register on the energy meter. Each month, the total quantity of renewable generation that is generated by the ERG Customer and delivered to the grid shall be multiplied by the applicable ERG Rate, and that amount will be credited toward the ERG Customer's monthly bill. If the amount credited to the ERG Customer exceeds the total amount of the ERG

Customer's monthly bill, then that excess amount shall be carried forward to the next month's bill.

d. ERG Rate

The ERG Rate shall be adjusted September 1 of each year to reflect the Utility's prior fiscal year costs and will be posted on the Utility's website. If the ERG Rate is not adjusted or otherwise updated for any individual year, the most recently effective ERG Rate shall apply. The ERG Rate will include: (i) the Utility's annual applicable weighted average cost of energy purchased from the California Independent System Operator (CAISO); (ii) the Utility's annual weighted average CAISO Wheeling Access Charge; and (iii) value of renewable energy credits based on the Utility's most recently executed renewable power purchase contractual commitment of ten years or more. The currently applicable ERG Rate shall be posted to IPU's website.

e. Net Bill Credit.

If there is a total net bill credit in any month, that credit will be carried forward to the next month's bill.

f. Generation utilized on-site by the ERG Customer.

Electricity supplied by the Renewable Electrical Generation Facility that is utilized on-site by the ERG Customer will not be measured, charged, or credited by IPU.

D. Special Conditions

1. Definitions.

Renewable Electrical Generation Facility: a facility that generates electricity from a renewable source listed in paragraph (1) of subdivision (a) of Section 25741 of the California Public Resources Code including biomass, solar thermal, photovoltaic, wind, geothermal, fuel cells using renewable fuels, small hydroelectric generation, digester gas, municipal solid waste conversion, landfill gas, ocean wave, ocean thermal, or tidal current, and any additions or enhancements to the facility using that technology.

2. Agreement.

In order for this schedule to apply, Customer must complete and sign the ERG Interconnection Agreement. This agreement contains additional terms and conditions, including without limitation, requirements relating to indemnification, insurance, and access to ERG Customer's premises.

The ERG Interconnection Agreement application fee shall be:

$300 for installations up to 100 kW,
$800 for installations greater than 100 kW, but less than 200 kW, and
$2,000 for installations greater than 200 kW.

3. Meter Requirements.

IPU shall own, operate, and maintain a single meter on Customer's premises capable of registering the flow of electricity in two directions.

If the existing meter on Customer's premises is not capable of measuring the flow of electricity in two directions or supplying time-of-use information, Customer shall be responsible for the expenses involved in the purchase and installation of the meter.

F. Billing.

ERG Customers shall be billed monthly, as set forth in the ERG Customer's otherwise applicable Rate Schedule.

INDUSTRY PUBLIC UTILITIES COMMISSION

INDUSTRY PUBLIC UTILITIES COMMISSION
NOTICE OF PUBLIC HEARING
PURSUANT TO INDUSTRY MUNICIPAL CODE SECTION 7.04.060(d)

NOTICE IS HEREBY GIVEN that the Industry Public Utilities Commission ("IPUC") will hold a public hearing on January 12, 2023, at 8:30 a.m., or as soon thereafter as the matter made be heard, to consider the following matter:

A RESOLUTION OF THE INDUSTRY PUBLIC UTILITIES COMMISSION REVISING THE SCHEDULE OF ELECTRIC RATES AND ELECTRIC SERVICE RULES FOR ELECTRIC SERVICE PROVIDED BY INDUSTRY PUBLIC UTILITIES, PURSUANT TO SECTION 7.04.060.D. OF THE INDUSTRY MUNICIPAL CODE, AND ADOPTING A NOTICE OF EXEMPTION REGARDING SAME

The IPUC will conduct a public hearing to consider adding: (i) Schedules Net Energy Metering 1.0 ("NEM1.0") and Eligible Renewable Generation ("ERG") to the Schedule of Rates that would be applicable to a customer who operates a renewable electrical generating facility located on the customer's premises that is interconnected and operates in parallel with the IPU's electric system; and (ii) Electric Rule 21 (Generating Facilities Interconnection) to the Electric Service Rules. The "Net Surplus Compensation Rate" listed in Schedule NEM1.0 and Schedule ERG is $0.0.07668 per kilo-watt hour until September 1, 2023 and will be adjusted annually after that and posted on the IPU website. Electric Rule 21 specifies the program requirements for customers installing qualifying renewable electric generating facilities that operate in parallel with the IPU's electric system.

A copy of all relevant material, including the Schedule of Rates NEM1.0 and ERG and Electric Rule 21 are on file in the IPU's Administrative Offices, 15625 Mayor Dave Way, City of Industry, California 91744 and on the website at https://www.cityofindustry.org/city-hall/boards-commissions/industry-public-utilities-commission. Please contact Julie Gutierrez-Robles, Commission Secretary, at the City of Industry, at 626-333-2211 or by email at jgrobles@cityofindustry.org if you have questions.

ELECTRONIC PARTICIPATION

Pursuant to Section 3 of Executive Order N-29-20, issued by Governor Newsom on March 17, 2020, the regular meeting of the IPUC will be held in person and telephonically. Members of the public are able to attend the hearing telephonically and offer public comment by calling the following conference call number: 657-204-3264 and entering the following Conference ID: 192 360 670#.

Any persons wishing to speak for or against this matter may call the conference number listed above, and you will be selected from the queue when it is your turn to speak, and may also

appear in person. All interested persons are invited to inspect the file and give testimony during the public hearing.

Written comments may be sent via U.S. Mail to the Commission Secretary, at the address listed above, and must be received at, or prior to, the public hearing. Comments may be emailed to the Commission Secretary at the email set forth above, and must be received 30 minutes prior to the start of the hearing.

If you challenge the nature of the proposed items in court, you may be limited to raising only those issues you or someone else raised at the public hearing described in this notice, or in written correspondence delivered to the City at, or prior to, the public hearing.

Julie Gutierrez-Robles
Commission Secretary

Industry Public Utilities ("IPU") INTERCONNECTION AND NET ENERGY METERING AGREEMENT

This Interconnection and Net Energy Metering Agreement for Renewable Electric Facilities ("Agreement") is made and entered into by and between:

_____("Customer"),
whose mailing address is:

_____ and
the Industry Public Utilities, a public agency organized and existing under the laws of the State of California ("IPU"), sometimes also referred to herein jointly as "Parties" or individually as "Party."

1. APPLICABILITY

This Agreement is applicable only to customers who satisfy all requirements of the definition of an Eligible Customer-Generator as set forth in Section 2827(b)(4) of the California Public Utilities Code on the effective date of this Agreement. To qualify as an Eligible Customer Generator, the expected annual generation from the Renewable Electrical Generation Facility must not exceed the Customer's load for the prior full calendar year, or if insufficient historical load data is available, the expected annual load based on the customer type and characteristics. Customer represents that customer is an Eligible Customer-Generator.

This Agreement is available on a first-come, first-served basis, until the total rated generating capacity of Eligible Customer-Generator customers exceeds five percent of IPU's aggregate customer peak demand. Once the total rated generation capacity reaches five percent of IPU's aggregate customer peak demand, this rate schedule is closed to new customers.

2. DESCRIPTION OF CUSTOMER'S RENEWABLE ELECTRIC GENERATING FACILITY

2.1. Customer elects to interconnect and operate a renewable electric generation facility, as defined in Section 25741(a) (1) of the California Public Resources Code, located on Customer's owned, leased or rented premises within IPU's service area ("Generating Facility") in parallel with IPU's electric grid. Customer represents that the Generating Facility is intended primarily to offset part or all of the Customer's own electrical requirements but, will not be designed to produce net generation in excess of the property's future consumption needs.

2.2. Generating Facility Identification Number:

_____

2.3. Customer Meter Number:

_____

2.4. Customer Service Account Number:

_____

2.5. Applicable Rate Schedule:

_____

2.6. Generating Facility Location:

_____

2.7. Generating Facility Technology:

_____

2.8. Generating Facility Nameplate Rating (kW):

_____

2.9. Estimated monthly energy production of Generating Facility (kWh):

_____

2.10. Estimated date when Generating Facility will be ready to commence parallel operation with IPU's electric system:

_____

3. INTERCONNECTION, DESIGN AND CUSTOMER REQUIREMENTS

3.1. Customer shall deliver the available energy to IPU at the Required Meter (as defined in Subsection 4.1 below) located on the Customer's premises.

3.2. Customer shall be responsible for the design, installation, operation, and maintenance of the Generating Facility and shall obtain and maintain any required governmental authorizations and permits.

3.3. Customer shall conform to all applicable solar electrical generating system safety and performance standards established by the National

Electrical Code ("NEC"), the Institute of Electrical and Electronics Engineers ("IEEE"), and accredited, nationally recognized testing laboratories such as Underwriters Laboratories, applicable building codes, and to all applicable IPU's Electric Service Requirements, as may be amended from time to time.

3.4. Customer shall not commence parallel operation of the Generating Facility until Customer receives written approval from IPU's Authorized Representative. This individual shall consider such written approval upon IPU's receipt of a copy of the final inspection and approval of the Generating Facility that has been issued by the governmental authority having jurisdiction to inspect and approve the installation. Such approval shall not be unreasonably withheld.

3.5. IPU shall have the right to have its representatives present at the final inspection made by the governmental authority having jurisdiction to inspect and approve the installation of the Generating Facility. Customer shall notify IPU in accordance with the terms of Section 13, herein, at least five days prior to such inspection.

3.6. Customer shall not add generation capacity in excess of the Nameplate Rating set forth in Section 2.8 of this Agreement, or otherwise modify the Generating Facility without the prior written permission of IPU.

3.7. Customer shall install a visible disconnect switch for the Generating Facility. The disconnect switch shall be lockable in the open position and directly accessible to IPU employees at all times. The disconnect switch should be at a location at/near the meter or if not, the location should then be specified by directions posted at the utility meter.

4. METER REQUIREMENTS

4.1. In accordance with IPU's Rules and Regulations for Electrical Service, IPU shall own, operate, and maintain on Customer's premises a single meter capable of registering the flow of electricity in two directions ("Required Meter").

4.2. 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, IPU shall be responsible for the expenses involved in the purchase and installation of a Required Meter, which shall be installed after obtaining Customer's consent for the installation.

4.3. If an additional meter or meters are installed, the Net Energy Metering (as defined in Subsection 9.1 below) calculation shall yield a result identical to that of a single meter.

5. DISCONNECTION, INTERRUPTION OR REDUCTION OF DELIVERIES

5.1. IPU shall not be obligated to accept or pay for, and may require Customer to curtail, interrupt, or reduce, deliveries of available energy from its Generating Facility as described in IPU's Electric Service Rule 21 and Generation Interconnection Standards and Guideline ("GIST"):

5.1.1. Whenever IPU deems it necessary in its sole judgment, to construct, install, maintain, repair, replace, remove, investigate, or inspect any of its equipment or any part of its electric system; or

5.1.2. Whenever IPU determines in its sole judgment, that curtailment, interruption, or reduction of Customer's electrical generation is otherwise necessary due to emergencies, forced outages, *force majeure*, or compliance with prudent electrical practices.

5.2. Whenever reasonably possible, IPU shall give Customer reasonable notice of the possibility that curtailment, interruption, or reduction of such deliveries may be required.

5.3. Notwithstanding any other provision of this Agreement, if at any time IPU determines that either (a) the Generating Facility or its operation may endanger the health, safety, or welfare of IPU personnel, any person or the public, or (b) the continued operation of the Generating Facility may endanger the integrity of IPU's electric system, any property or the environment, IPU shall have the right to enter onto Customer's premises and disconnect Customer's Generating Facility from IPU's system. Customer's Generating Facility shall remain disconnected until such time as IPU is satisfied that the condition(s) referenced in (a) and (b) of this Subsection 5.3 have been corrected.

6. ACCESS TO PREMISES

IPU may enter Customer's premises at all reasonable hours without notice to Customer for the following purposes:

(a) To inspect Customer's protective devices and read or test the meter(s); and

(b) To disconnect the Generating Facility and/or service to Customer, whenever in IPU's opinion, a hazardous condition exists and such immediate action is necessary to protect persons, IPU's facilities, or property of others from damage or interference caused by the Generating Facility, or the absence or failure of properly operating protective devices.

7. PERMITS AND MAINTENANCE

Customer shall, at its sole cost and expense, (a) maintain the Generating Facility and interconnection facilities in a safe and prudent manner and in conformance with all applicable laws and regulations including, but not limited to Section 3, and (b) obtain any governmental authorizations and permits required for the construction and operation of the Generating Facility and interconnection facilities and performance of this Agreement. Customer shall reimburse IPU for any and all losses, damages, claims, penalties, or liability it incurs as a result of Customer's failure to obtain or maintain any governmental authorizations and permits required for construction and operation of Customer's Generating Facility and performance of this Agreement.

8. INDEMITY AND LIABILITY

8.1. Customer shall defend, indemnify, and hold harmless IPU's elected or appointed officials, directors, and/or officers, its employees, representatives, and agents (individually and collectively hereinafter "IPU Indemnitees"), from and against any and all liabilities, claims, actions, causes of action, suits, proceedings, demands, losses, damages, judgments, liens, levies, costs and expenses of whatever nature, including reasonable attorneys' fees and costs (collectively "Claims"), which IPU Indemnitees may suffer or incur or to which IPU Indemnitees may be subject by reason of or arising out of by the negligent or willful acts or omissions of Customer, or any of its respective agents, officers, directors, employees, consultants or subcontractors, committed in connection with (a) any act or omission in the engineering, design, construction, destruction, maintenance, repair, operation, supervision, inspection, testing, protection or ownership of the Generating Facility, (b) any act or omission in the replacement, addition, betterment, reconstruction, removal, or destruction, of or to the Generating Facility, or (c) the Generating Facility. The foregoing notwithstanding, the provisions of this paragraph shall not apply to Claims occurring as a result of negligence or willful misconduct proven to have been caused by IPU Indemnitees.

8.2. The indemnitor shall, on the other Party's request, defend any suit asserting a claim covered by this indemnity and shall pay for all costs, including reasonable attorney fees that may be incurred by the other Party in enforcing this indemnity.

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

8.4. Except as otherwise provided in Section 8.1, neither Party shall be

liable to the other Party for consequential damages incurred by that Party.

8.5. Nothing in this Agreement shall create any duty to, any standard of care with reference to, or any liability to any person who is not a Party to it.

8.6. Notwithstanding the provisions of Section 8.1, Customer shall be responsible for protecting its Generating Facility from damage by reason of the electrical disturbances or faults caused by the operation, faulty operation, or non-operation of IPU's facilities and IPU shall not be liable for any such damage so caused.

9. RATES AND BILLING

9.1. All rates charged will be in accordance with Customer's otherwise applicable tariff (Rate Schedule), as in effect from time to time, on a Net Energy Metering basis. "Net Energy Metering" means measuring the difference between the electricity supplied through the electric grid to the Customer and the electricity generated by Customer's Generating Facility and fed back to the electric grid over a 12-month billing period as described in Subsection 9.4 below.

9.2. Customer's otherwise applicable tariff (Rate Schedule) or "Rate Schedule" means the Rate Schedule in IPU's published Electric Rate Schedules that would otherwise apply to Customer from time to time in the absence of this Agreement.

9.3. Customer is responsible for paying all charges in its Rate Schedule including any applicable customer charge, public purpose charge and demand charge, when applicable, regardless of Customer's monthly or annual net generation.

9.4. If Customer's applicable Rate Schedule is General Service (Schedule A) or Domestic Service (Schedule D), then the following provisions apply.

9.4.1. Customer will be billed on a 12-month basis initiating on the first day of the following month of the Generating Facility's final interconnection with IPU. The 12-month 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 the 12-month billing period.

9.4.2. At the end of each 12-month billing period, IPU shall determine if Customer was a net consumer or a net producer of electricity. In the event the electricity supplied by IPU during

the 12-month period exceeds the electricity generated by Customer during the same period, Customer is a net energy consumer.

9.4.3. If Customer is a net energy consumer, IPU shall bill Customer for the net energy consumption during the applicable 12-month billing period based on the Customer's Rate Schedule and Customer shall pay for such net energy consumption in accordance with Customer's billing statement. If Customer is a net energy producer at the end of the applicable 12-month billing period, then Section 9.10 shall apply.

9.5. If Customer's applicable Rate Schedule is Large General Service (Schedule B), or Larger General Service (Schedule C), then the following provisions apply.

9.5.1. Customer's Net Energy Metering calculation shall be calculated over each normal monthly billing period within a 12-month period initiating on first day of the following month from the date of the Generating Facility's final interconnection with IPU. 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.

9.5.2. At the end of each one-month billing period, IPU shall determine if Customer was a net consumer or a net producer of electricity. In the event the electricity supplied by IPU during the one-month period exceeds the electricity generated by Customer during the same period, Customer is a net energy consumer.

9.5.3. If Customer was a net energy consumer, IPU 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. If Customer is a net energy producer at the end of the applicable 12-month billing period, then Section 9.10 shall apply.

9.6. IPU shall provide Customer with Net Energy Metering consumption information on a monthly basis. If the Customer's applicable tariff (Rate Schedule) employs "time of use" rates, any net monthly consumption of electricity shall be calculated according to the terms of the rate schedule. When Customer is a net generator during any discrete time of use period, the net kilowatt hours produced shall be valued at the same price per kilowatt hour as IPU would charge for retail kilowatt hour

sales during that same time of use period.

9.7. If Customer terminates service under this Agreement prior to the end of any twelve-month period, IPU shall reconcile Customer's consumption and production of electricity and bill Customer for Net Energy Metering charges, if any. If at the end of the period prior to termination, Customer is a Net Surplus Customer-Generator, then IPU shall retain any Net Surplus Energy generated by Customer, including any associated environmental attributes or RECs. If Customer is eligible for Net Surplus Compensation, such compensation shall be calculated as measured from the end of the prior 12-month period until the date of termination.

9.8. If Customer is a net energy consumer during the applicable billing period, the Public Benefits Charge that is applicable to Customer under Customer's Rate Schedule shall be calculated based upon the Customer's Gross Energy Consumption, and monthly demand, if applicable, for such billing period. Gross Energy Consumption is defined as the sum of the net energy provided by IPU and the total production at the Generating Facility within the billing period.

9.9. If Customer is a net producer of electricity over a normal billing cycle, any excess kilowatt hours generated during the billing cycle shall be carried over to the following billing period (up to a maximum of twelve consecutive months upon the anniversary of interconnection).

9.10. At the end of each 12-month period, the following provisions apply:

9.10.1. IPU shall retain any net surplus energy generated by Customer, including any associated environmental attributes or renewable energy credits ("REC"), and Customer's monetary value shall be reset to zero for the subsequent 12-month period. No payment will be made to Customer for the excess energy delivered to IPU's grid, *unless Customer elects a compensation option in Subsection 9.10.3.*

9.10.2. Customer may be eligible for net surplus energy compensation. The Customer's net surplus energy compensation shall be calculated over a 12-month period beginning with the Customer's regularly scheduled meter read date at the start of their next 12-month billing cycle.

9.10.3. At the end of the 12-month period, upon certification by the Customer that they have sole ownership of the environmental attributes and REC associated with the energy generated from the Generating Facility in accordance with Subsection 9.10.5, Customer may receive net surplus energy compensation for net surplus energy by affirmatively electing one of the following methods (Please initial just one)

(a). ____ Receive *compensation based on the net surplus compensation rate for net surplus energy generated during the prior 12-month period.*

(b). ____ *Receive the net surplus energy 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, Customer also agrees that all environmental attributes and RECs associated with the kilowatt-hours generated shall be the property of IPU. Customer hereby transfers to IPU all rights, title, and interest Customer has to such environmental attributes and RECs.*

9.10.4. Affirmative elections remain effective for each 12-month period following the execution of such election. Customers are eligible to revise their net surplus energy compensation elections by giving written notice to IPU at least thirty-days prior to the beginning of each succeeding 12-month period.

9.10.5. Customer hereby certifies that they have sole ownership of the environmental attributes and REC 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 9.10.3, 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 IPU. Customer hereby transfers to IPU all rights, title, and interest Customer has to such environmental attributes and RECs.

10. INSURANCE

To the extent that Customer has currently in force all risk property insurance and comprehensive personal or commercial general liability insurance, Customer agrees that it will maintain such insurance in force for the duration of this Agreement. IPU and Industry shall have the right to inspect or obtain a copy of the original policy or policies of insurance prior to commencing operation. In the event the solar generating system is greater than 30 kW (AC), such insurance shall, by endorsement to the policy or policies, provide for thirty (30) calendar days written notice to IPU prior to cancellation, termination, alteration, or material change of such insurance.

11. GOVERNING LAW, VENUE

This Agreement shall be interpreted under, governed by, and construed in accordance with the laws of the State of California as if executed and to be performed wholly within the State of California, without regard to conflicts of law rules thereof. Any action at law or equity brought by either Party for the purpose of enforcing a right or rights provided in this Agreement shall be brought only in a court of proper jurisdiction in the County of Los Angeles, State of California, and the Parties hereby waive all other provisions of law providing for a change of venue in such proceedings to any other county. In event of a conflict between this contract and applicable provisions of state law, the later shall apply.

12. MODIFICATIONS, WAIVER, INTERPRETATION

12.1. No amendment or modification to this Agreement shall be effective unless in a writing duly executed 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 or 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 a waiver of the breach of any other term or covenant unless such waiver is in writing.

12.2. This Agreement shall supersede any existing agreement with IPU under which Customer is currently operating the Generating Facility identified in Section 2, herein, and any such agreement shall be deemed terminated as of the effective date of this Agreement.

12.3. This Agreement constitutes the final, complete and exclusive statement of the terms of the agreement between the Parties pertaining to the subject matter of this Agreement and supersedes all prior and contemporaneous understandings or agreements of the Parties. Neither Party has been induced to enter into this Agreement by, and neither party is relying on, any representation or warranty outside those expressly set forth in this Agreement.

12.4. Except as expressly modified herein, IPU's Rules and Regulations for Electrical Service as adopted from time to time by IPU shall continue to be applicable to IPU's provision of electrical service to Customer and performance of this Agreement.

13. NOTICES

13.1. Any notice required under this Agreement shall be in writing and mailed at any United States Post Office with postage prepaid and addressed to the Party, or personally delivered to the Party, at the address below.

Changes in such designation may be made by notice similarly given. All written notices shall be directed as follows:

If to IPU:
Industry Public Utilities
15625 Mayor Dave Way
City of Industry, California 91744
Attention: Public Utilities Director

With a copy to:
Casso and Sparks, LLP
13300 Crossroads Parkway North, Suite 410
City of Industry, California 91744
Attention: James M. Casso, General Counsel

Customer:
To the mailing address listed on page 1 of this Agreement.

13.2. Customer's notices to IPU pursuant to this Section shall refer to the Generating Facility Identification Number that is set forth in Section 2.2.

13.3. In the event of an emergency, Customer shall immediately notify IPU at its 24-hour emergencies number, 1-877-811-8700, of any emergency situations related to the Generating Facility.

14. TERM AND TERMINATION OF AGREEMENT

14.1. This Agreement shall become effective on the date this Agreement is duly executed by both Parties as set forth in Section 17 below and shall continue in full force and effect until terminated as provided herein.

14.2. This Agreement shall terminate on the earliest to occur of:

14.2.1. The thirtieth (30) day after Customer gives IPU prior written notice of termination with or without cause in accordance with Section 13.

14.2.2. The date both Parties agree in writing to terminate this Agreement.

14.2.3. The first day after IPU gives Customer written notice of termination for cause, provided that IPU shall first have given Customer written notice of Customer's breach of this Agreement and within thirty days of IPU's sending notice of such breach, Customer fails to cure such breach or, if such breach requires more than thirty days to cure, Customer fails to promptly commence cure of such breach and diligently prosecute such cure to completion.

14.2.4. The date IPU is no longer the electric supplier to Customer's premises; or

14.2.5. The date changes to Customer's electric load, or other circumstances, cause Customer to no longer satisfy all requirements of the definition of an Eligible Customer-Generator, as set forth in Section 2827(b)(4) of the California Public Utilities Code on the effective date of this Agreement.

14.2.6. After termination of this Agreement, any electric service provided by IPU to Customer shall be pursuant to and in accordance with Customer's Rate Schedule.

15. AUTHORIZED REPRESENTATIVE

IPU's Authorized Representative is the Public Utilities Director, or his designee. IPU may change its Authorized Representative by giving Customer notice pursuant to Section 13.

16. ASSIGNMENT PROHIBITED

Customer understands and agrees that this Agreement is personal to Customer and that Customer 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 to assign or transfer in any way all or any portion of this Agreement shall be void ab initio.

17. SIGNATURES

IN WITNESS WHEREOF, the Parties hereto have caused two originals of this Agreement to be executed by their duly authorized representatives on the dates set forth below. This Agreement is effective as of the latter of the two dates set forth below.

Customer

By: _____
Name: _____
Title: _____
Date: _____

Industry Public Utilities

By: _____
Name: _____
Title: _____
Date: _____

ATTEST:

By:

_____
Commission Secretary

APPROVED AS TO FORM:

By:

_____
General Counsel

SUBMITTALS REQUIRED:

1. Building Permit
2. Electric Single Line Diagram
3. Electric Load Schedule
4. Site Plan
5. Solar Generating System Electric Specifications
6. Solar Generating System Electric Certification

INDUSTRY PUBLIC UTILITIES ("IPU") INTERCONNECTION AND ELIGIBLE RENEWABLE GENERATION AGREEMENT

This Interconnection and Eligible Renewable Generation Agreement ("Agreement") is made and entered into by and between:

_____("Customer"),
whose mailing address is:

_____ and
the Industry Public Utilities, a public agency organized and existing under the laws of the State of California("IPU"), sometimes also referred to herein jointly as "Parties" or individually as "Party."

1. APPLICABILITY

This Agreement is applicable only to customers who satisfy the requirements of the definition of an Eligible Customer-Generator as set forth in Section 2827(b)(4) of the California Public Utilities Code on the effective date of this Agreement. To qualify as an Eligible Customer Generator, the expected annual generation from the Renewable Electrical Generation Facility must not exceed the Customer's load for the prior full calendar year, or if insufficient historical load data is available, the expected annual load based on the customer type and characteristics. Customer represents that customer is an Eligible Customer-Generator.

2. DESCRIPTION OF CUSTOMER'S RENEWABLE ELECTRIC GENERATING FACILITY

2.1. Customer elects to interconnect and operate a renewable electric generation facility, as defined in Section 25741(a) (1) of the California Public Resources Code, located on Customer's owned, leased or rented premises within IPU's service area ("Generating Facility") in parallel with IPU's electric grid. Customer represents that the Generating Facility is intended primarily to offset part or all of the Customer's own electrical requirements but, will not be designed to produce net generation in excess of the property's future consumption needs.

2.2. Generating Facility Identification Number:

_____

2.3. Customer Meter Number:

_____

2.4. Customer Service Account Number:

_____

2.5. Applicable Rate Schedule:

_____

2.6. Generating Facility Location:

_____

2.7. Generating Facility Technology:

_____

2.8. Generating Facility Nameplate Rating (kW):

_____

2.9. Estimated monthly energy production of Generating Facility (kWh):

_____

2.10. Estimated date when Generating Facility will be ready to commence parallel operation with IPU's electric system:

_____

3. INTERCONNECTION, DESIGN AND CUSTOMER REQUIREMENTS

3.1. Customer shall deliver the available energy to IPU at the Required Meter (as defined in Subsection 4.1 below) located on the Customer's premises.

3.2. Customer shall be responsible for the design, installation, operation, and maintenance of the Generating Facility and shall obtain and maintain any required governmental authorizations and permits.

3.3. Customer shall conform to all applicable solar electrical generating system safety and performance standards established by the National Electrical Code ("NEC"), the Institute of Electrical and Electronics Engineers ("IEEE"), and accredited, nationally recognized testing laboratories such as Underwriters Laboratories, applicable building codes, and to all applicable IPU's Electric Service Requirements, as may be amended from time to time.

3.4. Customer shall not commence parallel operation of the Generating Facility until Customer receives written approval from IPU's Authorized Representative. This individual shall consider such written approval upon IPU's receipt of a copy of the final inspection and approval of the Generating Facility that has been issued by the governmental authority having jurisdiction to inspect and approve the installation. Such approval shall not be unreasonably withheld.

3.5. IPU shall have the right to have its representatives present at the final inspection made by the governmental authority having jurisdiction to inspect and approve the installation of the Generating Facility. Customer shall notify IPU in accordance with the terms of Section 13, herein, at least five days prior to such inspection.

3.6. Customer shall not add generation capacity in excess of the Nameplate Rating set forth in Section 2.8 of this Agreement, or otherwise modify the Generating Facility without the prior written permission of IPU.

3.7. Customer shall install a visible disconnect switch for the Generating Facility. The disconnect switch shall be lockable in the open position and directly accessible to IPU employees at all times. The disconnect switch should be at a location at/near the meter or if not, the location should then be specified by directions posted at the utility meter.

4. METER REQUIREMENTS

4.1. In accordance with IPU's Rules and Regulations for Electrical Service, IPU shall own, operate, and maintain on Customer's premises a single meter capable of registering the flow of electricity in two directions ("Required Meter").

5. DISCONNECTION, INTERRUPTION OR REDUCTION OF DELIVERIES

5.1. IPU shall not be obligated to accept or pay for, and may require Customer to curtail, interrupt, or reduce, deliveries of available energy from its Generating Facility as described in IPU's Electric Service Rule 21 and Generation Interconnection Standards and Guideline ("GIST"):

5.1.1. Whenever IPU deems it necessary in its sole judgment, to construct, install, maintain, repair, replace, remove, investigate, or inspect any of its equipment or any part of its electric system; or

5.1.2. Whenever IPU determines in its sole judgment, that curtailment, interruption, or reduction of Customer's electrical

generation is otherwise necessary due to emergencies, forced outages, *force majeure*, or compliance with prudent electrical practices.

5.2. Whenever reasonably possible, IPU shall give Customer reasonable notice of the possibility that curtailment, interruption, or reduction of such deliveries may be required.

5.3. Notwithstanding any other provision of this Agreement, if at any time IPU determines that either (a) the Generating Facility or its operation may endanger the health, safety, or welfare of IPU personnel, any person or the public, or (b) the continued operation of the Generating Facility may endanger the integrity of IPU's electric system, any property or the environment, IPU shall have the right to enter onto Customer's premises and disconnect Customer's Generating Facility from IPU's system. Customer's Generating Facility shall remain disconnected until such time as IPU has provided written confirmation that the condition(s) referenced in (a) and (b) of this Subsection 5.3 have been corrected.

6. ACCESS TO PREMISES

IPU may enter Customer's premises at all reasonable hours without notice to Customer for the following purposes:

(a) To inspect Customer's protective devices and read or test the meter(s); and

(b) To disconnect the Generating Facility and/or service to Customer, whenever in IPU's opinion, a hazardous condition exists and such immediate action is necessary to protect persons, IPU's facilities, or property of others from damage or interference caused by the Generating Facility, or the absence or failure of properly operating protective devices.

7. PERMITS AND MAINTENANCE

Customer shall, at its sole cost and expense, (a) maintain the Generating Facility and interconnection facilities in a safe and prudent manner and in conformance with all applicable laws and regulations including, but not limited to Section 3, and (b) obtain any governmental authorizations and permits required for the construction and operation of the Generating Facility and interconnection facilities and performance of this Agreement. Customer shall reimburse IPU for any and all losses, damages, claims, penalties, or liability it incurs as a result of Customer's failure to obtain or maintain any governmental authorizations and permits required for construction and operation of Customer's Generating Facility and performance of this Agreement.

8. INDEMITY AND LIABILITY

8.1. Customer shall defend, indemnify, and hold harmless IPU's elected or appointed officials, directors, and/or officers, its employees, representatives, and agents (individually and collectively hereinafter "IPU Indemnitees"), from and against any and all liabilities, claims, actions, causes of action, suits, proceedings, demands, losses, damages, judgments, liens, levies, costs and expenses of whatever nature, including reasonable attorneys' fees and costs (collectively "Claims"), which IPU Indemnitees may suffer or incur or to which IPU Indemnitees may be subject by reason of or arising out of by the negligent or willful acts or omissions of Customer, or any of its respective agents, officers, directors, employees, consultants or subcontractors, committed in connection with (a) any act or omission in the engineering, design, construction, destruction, maintenance, repair, operation, supervision, inspection, testing, protection or ownership of the Generating Facility, (b) any act or omission in the replacement, addition, betterment, reconstruction, removal, or destruction, of or to the Generating Facility, or (c) the Generating Facility. The foregoing notwithstanding, the provisions of this paragraph shall not apply to Claims occurring as a result of negligence or willful misconduct proven to have been caused by IPU Indemnitees.

8.2. The indemnitor shall, on the other Party's request, defend any suit asserting a claim covered by this indemnity and shall pay for all costs, including reasonable attorney fees that may be incurred by the other Party in enforcing this indemnity.

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

8.4. Except as otherwise provided in Section 8.1, neither Party shall be liable to the other Party for consequential damages incurred by that Party.

8.5. Nothing in this Agreement shall create any duty to, any standard of care with reference to, or any liability to any person who is not a Party to it.

8.6. Notwithstanding the provisions of Section 8.1, Customer shall be responsible for protecting its Generating Facility from damage by reason of the electrical disturbances or faults caused by the operation, faulty operation, or non-operation of IPU's facilities and IPU shall not be liable for any such damage so caused.

9. RATES AND BILLING

9.1. Subject to Section 9.2, Customer shall be billed and/or compensated in accordance with IPU's Schedule ERG.

9.2. No compensation for electricity delivered to the grid will be made to Customer, *unless Customer agrees to or certifies (as applicable) to both of the following:*

____ (Please initial) Customer agrees that all environmental attributes and/or renewable energy credits ("REC"), associated with all kilowatt-hours generated by the Generating Facility shall be the property of IPU.

____ (Please initial) Customer hereby certifies that they have sole ownership of the environmental attributes and REC associated with the energy generated from the Generating Facility. Customer hereby transfers to IPU all rights, title, and interest Customer has to such environmental attributes and RECs.

10. INSURANCE

To the extent that Customer has currently in force all risk property insurance and comprehensive personal or commercial general liability insurance, Customer agrees that it will maintain such insurance in force for the duration of this Agreement. IPU and Industry shall have the right to inspect or obtain a copy of the original policy or policies of insurance prior to commencing operation. In the event the solar generating system is greater than 30 kW (AC), such insurance shall, by endorsement to the policy or policies, provide for thirty (30) calendar days written notice to IPU prior to cancellation, termination, alteration, or material change of such insurance.

11. GOVERNING LAW, VENUE

This Agreement shall be interpreted under, governed by, and construed in accordance with the laws of the State of California as if executed and to be performed wholly within the State of California, without regard to conflicts of law rules thereof. Any action at law or equity brought by either Party for the purpose of enforcing a right or rights provided in this Agreement shall be brought only in a court of proper jurisdiction in the County of Los Angeles, State of California, and the Parties hereby waive all other provisions of law providing for a change of venue in such proceedings to any other county. In event of a conflict between this contract and applicable provisions of state law, the later shall apply.

12. MODIFICATIONS, WAIVER, INTERPRETATION

12.1. No amendment or modification to this Agreement shall be effective unless in a writing duly executed 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 or 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 a waiver of the breach of any other term or covenant unless such waiver is in writing.

12.2. This Agreement shall supersede any existing agreement with IPU under which Customer is currently operating the Generating Facility identified in Section 2, herein, and any such agreement shall be deemed terminated as of the effective date of this Agreement.

12.3. This Agreement constitutes the final, complete and exclusive statement of the terms of the agreement between the Parties pertaining to the subject matter of this Agreement and supersedes all prior and contemporaneous understandings or agreements of the Parties. Neither Party has been induced to enter into this Agreement by, and neither party is relying on, any representation or warranty outside those expressly set forth in this Agreement.

12.4. Except as expressly modified herein, IPU's Rules and Regulations for Electrical Service as adopted from time to time by IPU shall continue to be applicable to IPU's provision of electrical service to Customer and performance of this Agreement.

13. NOTICES

13.1. Any notice required under this Agreement shall be in writing and mailed at any United States Post Office with postage prepaid and addressed to the Party, or personally delivered to the Party, at the address below. Changes in such designation may be made by notice similarly given. All written notices shall be directed as follows:

If to IPU:
Industry Public Utilities
15625 Mayor Dave Way
City of Industry, California 91744
Attention: Public Utilities Director

With a copy to:
Casso and Sparks, LLP
13300 Crossroads Parkway North, Suite 410

City of Industry, California 91744
Attention: James M. Casso, General Counsel

Customer:
To the mailing address listed on page 1 of this Agreement.

13.2. Customer's notices to IPU pursuant to this Section shall refer to the Generating Facility Identification Number that is set forth in Section 2.2.

13.3. In the event of an emergency, Customer shall immediately notify IPU at its 24-hour emergencies number, 1-877-811-8700 , of any emergency situations related to the Generating Facility.

14. TERM AND TERMINATION OF AGREEMENT

14.1. This Agreement shall become effective on the date this Agreement is duly executed by both Parties as set forth in Section 17 below and shall continue in full force and effect until terminated as provided herein.

14.2. This Agreement shall terminate on the earliest to occur of:

13.2.1 The thirtieth (30) day after Customer gives IPU prior written notice of termination with or without cause in accordance with Section 13.

13.2.2 The date both Parties agree in writing to terminate this Agreement.

13.2.3 The first day after IPU gives Customer written notice of termination for cause, provided that IPU shall first have given Customer written notice of Customer's breach of this Agreement and within thirty days of IPU's sending notice of such breach, Customer fails to cure such breach or, if such breach requires more than thirty days to cure, Customer fails to promptly commence cure of such breach and diligently prosecute such cure to completion.

13.2.4 The date IPU is no longer the electric supplier to Customer's premises; or

13.2.5 The date changes to Customer's electric load, or other circumstances, cause Customer to no longer satisfy all requirements of the definition of an Eligible Customer-Generator, as set forth in Section 2827(b)(4) of the California Public Utilities Code on the effective date of this Agreement.

13.3 After termination of this Agreement, any electric service provided by IPU to Customer shall be pursuant to and in accordance with Customer's Rate Schedule.

15. AUTHORIZED REPRESENTATIVE

IPU's Authorized Representative is the Public Utilities Director, or his designee. IPU may change its Authorized Representative by giving Customer notice pursuant to Section 13.

16. ASSIGNMENT PROHIBITED

Customer understands and agrees that this Agreement is personal to Customer and that Customer 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 to assign or transfer in any way all or any portion of this Agreement shall be void ab initio.

17. SIGNATURES

IN WITNESS WHEREOF, the Parties hereto have caused two originals of this Agreement to be executed by their duly authorized representatives on the dates set forth below. This Agreement is effective as of the latter of the two dates set forth below.

Customer	**Industry Public Utilities**
By: _____	By: _____
Name: _____	Name: _____
Title: _____	Title: _____
Date: _____	Date: _____

ATTEST:

By:

_____
Commission Secretary

APPROVED AS TO FORM:

By:

_____
General Counsel

SUBMITTALS REQUIRED:

1. Building Permit
2. Electric Single Line Diagram
3. Electric Load Schedule
4. Site Plan
5. Solar Generating System Electric Specifications
6. Solar Generating System Electric Certification

INDUSTRY PUBLIC UTILITIES
ELECTRIC SERVICE RULES, REGULATIONS AND RATE SCHEDULES

RULE 21 – Generating Facility Interconnections

A. APPLICABILITY

This Rule describes the interconnection, operating and metering requirements for Generating Facilities to be connected to the Industry Public Utility's ("IPUs") Distribution System. Subject to the requirements of this Rule, the Utility will allow the Interconnection of Generating Facilities with its Distribution System.

This rule sets forth requirements and conditions for non-Utility-owned energy resource facilities where such energy resource may be connected in parallel operation with the Utility's system. For purposes of this rule, the interconnecting entity shall be designated as the Producer.

This rule does not constitute an agreement or commitment to purchase or deliver the Producer's power. The purchase or delivery of power and other services that the Producer may require are covered under separate agreements, if any. This Rule does not apply to Eligible Customer-Generators, except those subject to Net Energy Metering 1.0 ("NEM1.0") and only to the extent set forth herein.

B. CONDITIONS

1. Prior to parallel operation of its energy resource facility with the Utility's system, the Producer shall (a) execute an interconnection agreement with the Utility in the form most recently approved by the Industry Public Utility Commission ("Net Energy Metering Interconnection Agreement"), and (b) obtain the requisite City and Los Angeles County permits and authorizations for parallel operation.
2. At all times, the Producer shall design, site, construct, install, operate, and maintain its energy resource and interconnection facilities in compliance with the following:
   a. Applicable Rates, Rules and Regulations;
   b. The City's local permitting requirements, as administered through the City's Planning & Los Angeles County Building and Safety Department;
   c. The Utility's current Generation Interconnection Standards and Guidelines ("GISG");
   d. Applicable Federal Energy Regulatory Commission approved rules, tariffs, and regulations;
   e. Any applicable federal, state, or local laws; and
   f. Such other requirements contained in the Interconnection Agreement.
3. The Utility has the right, but not the obligation, to review the design of the Producer's energy resource and interconnection facilities and to inspect the Producer's energy resource and interconnection facilities prior to the commencement of parallel operation with the Utility's system. The Utility may require the Producer to make modifications, as necessary, to comply with the requirements of Section B.2 of this rule prior to commencement of operation.
4. The Producer shall operate and maintain its energy resource and interconnection facilities in accordance with prudent electrical practices and shall maintain compliance with all applicable federal, state, or local laws.
5. Where interconnection protective equipment is owned, operated and/or maintained by the Producer, the Producer shall be responsible for damages to the IPU and/or to others arising from Producer-owned equipment.
6. The Producer is solely responsible for providing protective equipment for all Producer facilities interconnected with the Utility's system as provided in the GISG.

7. The Producer shall grant the IPU the right of ingress and egress to the energy resource and interconnection site to examine the site and applicable facilities for any purpose reasonably connected with this Rule No. 21. To the extent applicable to the IPU's right to examine the Producer's energy resource facility, the Producer shall clearly identify to the IPU any safety-related equipment and signage utilized by the Producer at this energy resource facility.

8. The Utility has the right to require the Producer to interrupt, disconnect, or reduce output from its energy resource facility as follows:

   a. When necessary, in order to construct, install, maintain, repair, replace, remove, investigate, or inspect any of the Utility's equipment or part of the Utility's system;

   b. If the Utility determines in its sole discretion that curtailment, interruption, or reduction is necessary because of emergencies, forced or scheduled outages, force majeure, or compliance with prudent electrical practices;

   c. When the Producer's energy resource facilities or their operation endanger IPU and City personnel, the Utility's system, or pose an immediate threat to any person, the environment, or any property; or

   d. When the Producer fails to operate its energy resource facility in conformance with applicable federal, state, and local laws including the Rates, Rules, and Regulations and the GISG.

   The Utility may require the disconnection of the Producer's energy resource facility for as long as the conditions of (a) through (d) above exist. The Utility may, in its sole discretion, provide the Producer with reasonable notice of the possibility or actual interruption or reduction of energy resource output that may be required. The Utility shall not be required to provide written notice to the Producer when the Utility determines an emergency or unsafe operating condition exists related to the Producer's energy resource or interconnection facilities.

C. DESIGN AND OPERATING REQUIREMENTS

1. The Producer shall design, site, construct, install, operate, and maintain its energy resource facility in such manner as to prevent or protect against adverse conditions to the Utility's system including, but not limited to:

   a. Conditions, as determined by the Utility, that can cause harm to persons, equipment damage, or electric service degradation and reverse power at the interconnection point with SCE unless approved by IPU and SCE.

   b. Inadvertent and unwanted reenergizing of a utility dead line or bus.

   c. Interconnection while out of synchronization.

   d. Overcurrent.

   e. Utility system load imbalance.

   f. Ground faults.

   g. Generated alternating current frequency outside permitted safe limits of 59.9 to 60.10.

   h. Voltage generated outside permitted limits of 5% plus or minus of normal operating voltage.

   i. Poor power factor and power factor maintained close to 0.98 lagging at all times.

   j. Harmful wave forms.

   k. Voltage flicker.

   l. Unintended islanding, with the exception of designated protected loads that are disconnected from the Utility's system for the purpose of emergency operation.

2. The necessary protective equipment (relays, switchgear, transformers, etc.) shall be provided by the Producer or by the IPU at the Producer's expense.

D. INTERCONNECTION FACILITIES AND COST RESPONSIBILITIES

1. Interconnection facilities include all required means and apparatus installed to interconnect the Producer's energy resource facility with the Utility's system. Interconnection facilities may include, but are not limited to:

   a. Connections, transformations, switching, communications, control, protective and safety equipment, accessible visual disconnects; and

   b. Any necessary reinforcements and additions to the Utility's system installed by the Utility at the Producer's expense.

2. Interconnection facilities installed on the Producer's side of the point of interconnection shall be owned, operated, and maintained by the Producer, except for those facilities owned and/or operated by the Utility.

3. Costs for initial design, engineering, testing or materials

   Except as provided under applicable law, the Producer shall be responsible for all costs associated with interconnection facilities owned by the Producer. The Producer shall also be responsible for any costs reasonably incurred by the Utility in providing, operating, or maintaining interconnection facilities and any system upgrades and/or additions required solely for the interconnection of the Producer's energy resource facility with the Utility's system.

   The Producer shall pay the Utility's reasonable costs to provide design, engineering, testing, equipment, or materials at the request of the Producer. Such payment shall include, but not be limited to, the Utility's reasonable costs for labor, contracted labor, materials, and equipment incurred by the Utility in connection with this rule. The Producer shall make payment to the Utility prior to the Utility's approval of the Producer's energy resource and interconnection facilities. At its option, the Utility may consider the service as a request for Added Facilities by the Producer. The Utility may replace the Producer's interconnection facilities at the Producer's cost and expense whenever the Utility determines that such facilities have reached the end of their useful life, unless the Producer has terminated parallel operation of those facilities.

   The Utility shall review the Producer's plans as required to evaluate the effect of any proposed new construction or modification of any existing structure or facility upon the Utility's system. The Utility shall charge its reasonable costs for the Producer's plan reviews that require staff time or labor in excess of four (4) hours to complete.

4. An interconnection study shall take no more than three months to complete by the Utility. The estimated cost of the interconnection study shall be provided to the Producer prior to commencement of the interconnection study.

E. METERING, PROTECTIVE DEVICES AND OTHER RELATED EQUIPMENT

1. For the purposes of monitoring the Producer's operation, the Utility shall have the right to install meters and associated equipment at the Producer's expense.

2. The Producer shall provide, at no expense to the Utility, a suitable location for all meters and associated equipment.

3. The producer shall pay for the installation of the meter, protective devices, and other related equipment at the interconnection point with SCE of WDAT Switchgear or substation if required based on the power system analysis to safety connect generation with IPU distribution system and prevent reverse power to the electric grid unless approved by IPU and SCE.

F. ELIGIBLE CUSTOMER-GENERATORS

1. At its discretion, the Utility may determine that an NEM Eligible Customer-Generator is a Producer under this Rule No. 21. In the event of such determination, the Eligible Customer-Generator will be treated as a Producer under this Rule and must comply with all provisions of this Rule, Schedule ERG Tariff and ERG Interconnection Agreement.

2. Each NEM Eligible Customer-Generator, who is not subject to Section F.1 above, must comply with the Rates, Rules, and Regulations and applicable provisions of the GISG and Eligible Renewable Generation ("ERG") Interconnection Agreement.

Industry Public Utilities (IPU)

Generation Interconnection Standards and Guidelines

February 1, 2023

These standards and guidelines have been prepared by the Industry Public Utilities (IPU or Utility). They are available to interested parties for information, planning design, and construction of interconnection facilities for customer generators. Copies of this document and information pertaining to other requirements for electrical system interconnection to the Utility's distribution system may be obtained by downloading directly from Website address cityofindustry.org/city-hall/departments/industry-public-utilities/electric or by phone contacting 626-333-2211.

This document, in conjunction with applicable city, county, state and federal rules and regulations combine to form the standard to which all new interconnecting facilities for customer generation, shall conform.

The effective date of these standards and guidelines and revision dates are indicated on the title page of each document. All requirements of the guidelines are subject to change without notice; therefore, those who are contemplating any venture with the Utility, which will be regulated by these standards and guidelines, should make sure that they have the most current and latest revision.

The purpose of this document is to standardize equipment and facilities relating to interconnection facilities for both customer-owned and IPU-owned distributed generation systems within the Utility's service territory. Distributed generation is generally defined as generating sources whose combined gross output is less than 1 megawatts (MW) that is connected to the Utility system at a single point of interconnection. This document is designed to provide typical standards and guidelines for interconnection facilities for most distributed generation systems including solar, battery storage, gas-fired turbines, fuel cells, and reciprocating engines, however, design requirements are subject to adjustment as necessary.

Standards, rules and regulations of other agencies with jurisdiction in areas covered by this document are not altered in any way by these standards and guidelines. Any and all questions regarding applicability of various rules and regulations shall always be resolved in favor of the more stringent requirements.

Modifications and/or deviations to/from the requirements of the standards and guidelines contained in this document must be authorized, in writing, by the IPU Public Utilities Director. No work, which includes modifications to this document, should proceed without this written approval.

Generation Interconnection Standards and Guidelines

1.0 Introduction

These standards and guidelines state the minimum requirements for safe and effective operation of customer-owned and IPU-owned generation on the IPU electric system. Customers and IPU personnel shall be guided by this document when planning installations of distributed generation that is capable of extended parallel operation with the Utility system.

1.1 Policy on Customer Generation

As specified in the Utility Electric Rates, Rules and Regulations, Rule No. 21, it is the policy of the Utility to permit any customer to operate generating equipment in parallel with the electric system whenever this can be done without adverse effects on the general public, or to Utility equipment or personnel. Certain protective devices (relays, circuit breakers, etc.), specified by the Utility must be installed at any location where a customer desires to operate generation in parallel with the Utility. The purpose of these devices is to promptly disconnect within two seconds the customer's generating equipment from the Utility system whenever faults, abnormal, or unsafe operation occur. Other modifications to electrical system configuration or protective relays may be required to accommodate parallel generation.

The Utility will not assume any responsibility for protection of the customer's generator(s), or of any other portion of the customer's electrical equipment. The customer is fully responsible for protecting their equipment in such a manner that faults or other disturbances on the Utility system do not cause damage to the customer's equipment, or adversely affect the customer in any way.

1.2 Generation Sources

The customer may elect to use any of a variety of energy sources including solar, wind, battery storage or other types of sources, in addition to conventional fossil fuels. The end conversion of the connection to the Utility system must be into 60 Hz alternating current.

The customer may elect to run the generator in parallel with the utility or as a separate system with the capability of non-parallel load transfer between the two independent sources. The requirements of these two methods of operation are outlined in Sections 1.3 and 1.4.

1.3 Separate Systems

A separate system is defined as one in which there is no possibility of connecting the customer's generating equipment in parallel with the Utility's system. For this design to be practical, the customer must be capable of transferring load between the two systems in an open transition or non-parallel mode. This can be accomplished by either an electrically or mechanically interlocked switching arrangement that precludes operation of both switches in the closed position. Separate systems are typically designed as standby or backup emergency generation that serves dedicated loads at the customer facility in the event of an outage, i.e., when there is no electric service from the Utility.

If the customer has a separate system, the Utility will require verification that the transfer scheme meets the non-parallel requirements. This will be accomplished by approval of drawings by the IPU in writing

and, if the IPU so elects, by field inspection of the transfer scheme. The IPU will not be responsible for approving the customer's generation equipment and assumes no responsibility for its design or operation.

Most Uninterruptible Power Supply (UPS) systems do not specifically meet the separate system criteria. However, if they are not capable of back feed, they will be classified as a separate system. If they can back feed, they must meet the requirements of parallel operation.

1.4 Parallel Operation

A parallel system is defined as one in which the customer's generation can be connected to a bus common with the Utility's system. A transfer of power between the two systems is a direct and often desired result. A consequence of such parallel operation is that the parallel generator becomes an electrical part of the Utility system that must be considered in the electrical protection of the Utility's facilities.

Utility lines are subject to a variety of natural and man-made hazards. The electric problems that can result from these hazards require that the damaged equipment be de-energized as soon as possible and within two seconds of unintended islanding because of the hazards they pose to the public and to the operation and stability of the Utility system.

In systems without parallel generation, the Utility controls the only source of power supply to a given line and therefore has the responsibility to install equipment, which is adequate, under expected circumstances, to detect faulted equipment and de-energize it. A parallel generator connected to a Utility line represents another source of power to energize the line and must also have adequate protective devices installed to sense trouble on the Utility system.

For installations with larger generators, the probability of isolated operation is higher since the available generation may be sufficient to carry the entire load of the Utility's circuit. For these installations, specific devices are required for the detection of short circuits and grounds on the Utility system as well as voltage and frequency relays to detect isolated operation.

The general and specific requirements for parallel generation installations of various sizes are discussed in the following sections.

2.0 General Design Requirements

2.1 Design Requirements

2.1.1 The customer's installation must meet all applicable national, state, and local construction and safety codes.

a. Major equipment that is not included on the California Energy Commission's eligible equipment lists shall be evaluated for compliance with these interconnection guidelines.

b. It shall comply with the latest requirements of the following standards:

- ANSI/IEEE 1547 -2003 (R2008)- IEEE Standard for Interconnecting Distributed Resources with Electric Power Systems – Approved June 12, 2003, Reaffirmed September 25, 2008
- IEEE 1547a- 2014(Amendment to IEEE Std. 1547- 2003)- IEEE Standard for Interconnecting Distributed Resources with Electric Power Systems Amendment 1 – Approved May 16, 2014
- IEEE 1547.1 -2005 -IEEE Standard for Conformance Tests Procedures for Equipment Interconnecting Distributed Resources with Electric Power Systems- Approved June 9, 2005, and Reaffirmed June 16, 2011.
- IEEE 1547.2 – 2008- IEEE Application Guide for IEEE 1547- 2003, IEEE Standard for Interconnecting Distributed Resources with Electric Power System – Approved December 10, 2008.
- ANSI/IEEE 1547.3 – 2007- IEEE Guide for Monitoring, Information Exchange and Control of Distributed Resources Interconnected with Electric Power System – Approved May 17, 2007, by IEEE and October 30, 2007, by ANSI.
- IEEE 1547.7 – 2013 – IEEE Guide for Conducting Distribution Impact Studies for Distributed Resources Interconnection – Approved December 11, 2013.

- UL 1741- 2010 – UL Standard for Inverters, Converters, Controllers, and Interconnection System Equipment for Use with Distributed Energy Resources – published by UL LLC- Edition January 28, 2010,

- UL 1741-SA -2017 and Rule 21 – Enhanced anti – island testing to ensure PV systems disconnect when required and Safety Test Standards for certifying products which meet the rigorous requirements needed to ensure safe and reliable operation. Rule 21 is inverter related revision to the State of California Tariff Rule 21 made by CPUC

- NFPA 70 National Electrical Code (NEC) Standards for the Safe Installation of Electrical Wiring and Equipment

- National Electrical Safety Code (NESC@) Safety Standards for Underground Electric Utility and Communications Utility Installations
    - o Section 9 Grounding Methods for Electric Supply and Communications Facilities
    - o Section 11 Protective Arrangements in Electric Supply Stations

2.1.2 Protective devices (relays, fuses, circuit breakers, ground banks, etc.) for the protection of the Utility' system and synchronizing equipment must be installed as required by the City and Utility. A producer shall be solely responsible for providing adequate protection of its generating facility. Producer's protective functions shall not impact the operation of other protective functions on the Utility's system in a manner that would affect the Utility's capability of providing reliable service to its customers. For all generation systems including inverter-based resources, the responsible engineer/consultant shall make sure that work meets all the required safety and government rules and regulations and the correctness of protection. The City and Utility will review and approve the protection and SCADA interface requirements only.

2.1.3 Visible, Accessible, Lockable disconnect required. Customer shall furnish and install ganged, manually operated isolation switch near the point of interconnection to isolate the generator from the Utility's system. The following requirements shall be met:

- The disconnecting device shall allow visible verification that separation of the generator from the Utility's system has been accomplished. This requirement may be met by opening the enclosure to observe contact separation.

- The disconnecting device shall include markings or signage that clearly indicates open and closed positions.

- During electrical emergencies, it may be required to disconnect the generator from the Utility's system. Therefore, the disconnecting device shall be capable of being accessed quickly and conveniently 24 hours a day, 7 days a week by the Utility personnel without obstacles or requiring those seeking access to obtain keys, special permission, or security clearances, unless other arrangements for access are mutually agreed upon by both parties.

- The disconnecting device shall be capable of being locked using standard Utility padlocks in the open position.

- The disconnecting device shall be clearly marked on the submitted one-line diagram and its type and location approved by the Utility prior to installation.

- The disconnecting device shall be installed in such a location and in such a manner that Utility personnel will have access under all conditions and at all times.

- Monitoring, Information Exchange, and Control. As recommended by IEEE 1547.3 –

    1. 0 to 250 KVA – no real time monitoring is required.
    2. 251- 500 KVA – Real- time monitoring may be required depending upon the power system analysis.
    3. Above 500 KVA- Real- time monitoring of real power, reactive power, voltage and connection status via telemetry or installation of a SCADA RTU may be required.

- Based on the power system analysis additional work practices and procedures may be required for the maintenance and the operation of the IPU's distribution circuit with the customer generation in parallel operation.

2.1.4 Metering requirements are subject to the Utility's approval. Metering equipment must meet the Utility's specifications for service panel equipment and meters.

- For Commercial Distributed Generation sites with an output rating of equal to or less than 200Amps, the power production meter requires a commercial type service panel with test blocks.

- For Distributed Generation sites with an output rating of more than 200Amps, the power production meter requires a commercial type service panel that is at minimum 400Amps and is Current Transformer (CT) rated.

- Connection to metering equipment from Distributed Generation AC output must be to the top meter clips of the power production meter.

2.1.5 The customer shall provide three (3) sets of preliminary design drawings for initial review by the IPU, City and LAC Building and Safety, (given the number of reviewers is that enough sets?) and four (4) sets of final design drawings once all approvals are met. The IPU may request a title block on the drawings to allow for approval signatures as necessary. Drawings may be submitted in digital format; Design packages shall include:

Mandatory for all distributed generation systems:

- Interconnection Application Form
- Interconnection Agreement or Net Energy Metering Agreement
- Single-line diagram
- Site layout diagram, with generating source(s) and safety devices clearly identified
- Description of safety features (mechanical and electrical)
- All electrical elementary/wiring diagrams

Other information as required by the IPU, City and LA County Building and Safety:

Description of the distributed generation system, electrical parameters, mechanical parameters, operating principles and procedures

- All relay settings and coordination calculations, fuse sizes, breaker settings, and any associated data
- Transformer and cable data
- The design limitation of the excitation system for synchronous generators
- The design of the ground grid system
- The design and application of any solidly grounded transformer
- Certified test reports on all required relays showing relay settings and trip tests to the appropriate circuit breaker. The customer must specify that the IPU will approve only those portions of the drawings which apply to protection of the Utility system. The IPU may comment on other areas which appear to be incorrect or deficient but will not assume responsibility for the correctness of protection pertaining to the customer's system.

2.2 General Operating Requirements

2.2.1 The interconnection of the customer's generating equipment with the Utility system shall not cause any reduction in the quality of service being provided to other customers, with no abnormal voltages, frequencies, or interruptions being permitted. If high or low voltage complaints or flicker complaints result from operation of the customer's generation, such generating equipment shall be disconnected until the problem is resolved.

2.2.2 The customer may not commence parallel operation of generator(s) until the Utility has reviewed the design submittal and given final written approval. The Utility reserves the right to inspect the customer's facility and witness testing of any equipment or devices associated with the interconnection.

2.2.3 Customer shall comply with all the terms of the applicable Interconnection Agreement or the Net Metering Agreement.

2.2.4 The customer will not be permitted to energize a de-energized utility circuit and unintentional islanding. Certification to pass an applicable non- islanding test shall be required to ensure disconnecting generation within two seconds from the de-energized utility circuit in the event of unintentional islanding.

2.2.5 Operation of the customer's generator shall not adversely affect the voltage regulation of the Utility's system. Adequate voltage control shall be provided, by the customer, to minimize voltage regulation on the system caused by changing generator-loading conditions.

2.2.6 The customer shall maintain his equipment in good order. The Utility reserves the right to inspect the customer's facilities whenever it appears that the customer is operating in a manner hazardous to the Utility system's integrity.

2.2.7 The customer shall discontinue parallel operation when requested by the Utility:

a. To facilitate maintenance, test, or repair of utility facilities.

b. During system emergencies.

c. When the customer's generating equipment is interfering with other customers on the system.

d. When an inspection of the customer's generating equipment reveals a condition hazardous to the Utility system or a lack of scheduled maintenance or maintenance records for equipment necessary to protect the Utility system.

2.2.8 When required, and typically for larger generators (>1,000 kW), the customer shall maintain an operating log at each generating facility indicating changes in operating status (available or unavailable), maintenance outages, trip indications or other unusual conditions found upon inspection. For generators that are "blockloaded" to a specific kWh level, changes in this setting shall also be logged.

2.2.9 The Utility typically requires separate metering for distributed generation systems. The cost of the metering shall be at the expense of the Customer. In most cases, the Customer may be required to establish a new service account for the generating system. Contact Customer Service to establish a new service account.

2.3 Design Information — The Utility System

2.3.1 The Utility's primary distribution voltage is 12 kilovolts (kV), 3-wire, delta system. The customer should contact the Utility for information on the specific circuit serving the customer's facility.

2.3.2 Customers with three-phase generators should be aware that certain conditions in the Utility system might cause negative sequence currents to flow in the generator. It is the sole responsibility of the customer to protect his equipment from excessive negative sequence currents.

2.4 Induction Generators

Reactive power supply for induction generators may pose difficult design problems, depending on the generator size. For generator aggregating less than 100 kVA capacity, the Utility will supply the var requirements from general system sources without a specific charge to the customer. Installations over 100 kVA capacity will likely require capacitors to be installed to limit the adverse effects of reactive power flow on the Utility's system voltage regulation. Such capacitors will be installed at generating customer's expense. The installation of capacitors for reactive power supply at, or near, in induction generator greatly increases the risk that the induction machine may become self-excited if accidentally isolated from the Utility's system. Where self-excitation problems appear likely, special service arrangements will be required such as two-line loop service to avoid the induction generator becoming isolated with small amounts of load. In many cases, the additional expense for such special service methods may outweigh the cost savings associated with induction generators.

In cases where starting of, or load changing on, induction generators will have an adverse impact on system voltage, step-switched capacitors or other techniques may be required to bring the voltage changes to acceptable levels.

2.5 Synchronous Generators

For synchronous generators, sufficient generator reactive power capability shall be provided to withstand normal voltage changes on the Utility system. The generator voltage-var schedule, voltage regulator, and transformer ratio settings will be jointly determined by the Utility and the customer to ensure proper coordination of voltages and regulator action. Customers are encouraged to generate their own var requirements to minimize power factor adjustment charges and enhance generator stability. When the Utility installs capacitors to meet the var requirements of the system resulting from the customer's generator, the customer shall pay all costs of labor and associated costs incurred by the Utility in completing such installation.

Synchronous generator installations require a three-phase ground bank on the Utility system for sensing ground faults. The ground bank will be furnished and installed by the Utility at the Customer's expense.

2.6 Inverter Systems

Reactive power supply requirements for inverter systems are similar to those for induction generators and the general guidelines discussed in Section 2.4 apply. Likewise, inverter systems are also capable of isolated operation.

Self-commutated inverters have this capability of design. Line commutated inverters could operate isolated if connected to rotating machines which provide the necessary commutation. Because of these possibilities of self-excited operation, inverter systems are treated as induction machines in these guidelines.

If a customer using such a device is found to be adversely affecting the power quality of other customers or the utility, the Customer shall be required to install filtering to bring the harmonic output of his inverter to acceptable levels.

FIGURE A
CUSTOMER GENERATION INSTALLATION
(CONCEPTUAL ILLUSTRATION, NOT FOR DESIGN)
LESS THAN 100 KW

3.0 Specific Requirements

The IPU has established three different classes for customer-owned parallel generation, each with distinctive protection, metering and operating requirements. These classes are:

1. Less than or equal to 100 kW

2. Greater than 100 kW and less than 1,000 kW

3. Greater than 1,000 kW, with customer-owned protection

Where multiple generators are connected to the Utility's system through a single service point, the class will be determined by the sum of the ratings of the generators.

These classes have been established for convenience and are based on circuits with normal load density. The final decision as to the requirements for each installation will be made depending on customer load, the magnitude of other load connected to that circuit/system, available short circuit contribution, etc.

3.1 Total Generation Less Than or Equal To 100 kW

3.1.1 The following requirements for small generators are based on an assumed low density of parallel generation customers on the serving circuit. Other conditions may be imposed should the density exceed a tolerable limit. Refer to Figure A and/or D.

3.1.2 Customer generator controls to be equipped with a line voltage relay or contactor that will prevent the generator from being connected to a de-energized or single-phased (if normally three-phase) source. This relay is to disconnect the generator from a de-energized utility line and prevent its reconnection until the Utility reenergizes the line.

3.1.3 Specific site or technology conditions may have additional requirements.

3.2 Total Generation Greater Than 100 kW and Less Than 1,000 kW

3.2.1 Customer generator controls to be equipped with a line voltage relay or contactor that will prevent the generator from being connected to a de-energized or single-phased (if normally three-phase) source. This relay is to disconnect the generator from a de-energized utility line and prevent its reconnection until the Utility reenergizes the line.

3.2.2 Customer is to be served through a dedicated distribution transformer that serves no other customers. The purpose of the dedicated transformer is to ensure that the generator cannot become isolated with a small amount of other customer load. It also serves to confine any voltage fluctuations or harmonics produced by the generator to the customer's own system. In instances where it is impractical to provide a dedicated transformer, the relays may be accepted in lieu of the dedicated transformer. The relays may be arranged to de-energize the contactor. Refer to Figure B and/or D.

3.2.3 In order to reduce the possibility of self-excited operation, all reactive power requirements for induction generators or power inverters shall be supplied by the Utility. Except in an unusual

situation, this var supply will be from general utility sources and no specific charge will be made to the customer for the reactive power.

3.2.4 Existing kWh meters may be equipped with a ratchet device, or equivalent, to prevent reverse operation. Where surplus power sales are anticipated, the Utility will install additional metering so that kWh (in) and kWh (out) are separately recorded. Additional metering for kW and kVAR will be determined by the requirements of the individual installation.

3.3 Total Generation Greater Than 1,000 kW, With Customer-Owned Protection

3.3.1 All installations in this class require City review of the protective functions to be provided. Refer to Figure C for a typical installation. Note that certain requirements regarding liability and indemnity may apply to installations using customer-owned protection, which shall be defined in an Interconnection Agreement.

3.3.2 The customer shall provide adequate protective devices to:

a. Detect and clear the generator(s) from short circuits or grounds on the Utility facilities serving the customer.

b. Detect the voltage and frequency changes, which can occur if the Utility facilities serving the customer are disconnected from the system and clear the customer generation from the isolated system.

c. Prevent re-paralleling the customer generation, after an incident of trouble, unless the Utility service voltage is of normal magnitude and phase sequence.

3.3.3 Typical protection devices which may be required to satisfy the above requirements are:

a. Phase overcurrent trip devices.

In some cases, these will have to be voltage-restrained or voltage-controlled overcurrent relays in order to provide coordination with the Utility's relays.

b. Residual overcurrent or overvoltage relays to trip for ground faults on the Utility's system.

c. Under/overvoltage relays.

Undervoltage relays should be adjustable from 75-90% of nominal voltage and have time delay to prevent unnecessary tripping on external faults. Overvoltage relays should be adjustable from 110-120% of nominal voltage and may be instantaneous. Setting change with temperature variation should not exceed ± 2 volts over the expected temperature range.

d. Under/over frequency relays.

The underfrequency relay should be adjustable from 55-59 Hz and the overfrequency relay from 61-65 Hz. Setting change with temperature variation over the expected range, or voltage variation over ± 10%, should not exceed ± 1 Hz.

e. Phase sequence/undervoltage relay.

To permit paralleling when the Utility's voltage and phase sequence are normal.

f. Synchronizing relay

To permit parallel operation, and to synchronize with the Utility's system.

3.3.4 In specific installations, particularly with large generators (over 1,000 kW), the Utility may require specific additional protective functions such as loss of excitation, loss of synchronism and overexcitation protection, if these conditions would have an impact on the Utility system.

3.3.5 Depending on the size of the generation and the size of the distribution system to which it is connected, the Utility may require the customer to utilize "utility quality" protective relays, which are subject to the Utility's approval. Such relays have more stringent tolerances and more flexible, widely published characteristics than "industrial quality" relays. This requirement can be invoked only if generation is of such size that close coordination with the Utility relays is required. In general, installations aggregating less than 1,000 kVA will not be subject to this requirement.

3.3.6 Where induction generators or static inverters are employed rather than synchronous machines the phase overcurrent protective devices required by the Utility will be waived since these sources will not deliver sustained overcurrents.

3.3.7 In some cases, protective devices supplied with the generating equipment will meet some or all of these requirements, provided that it is capable to trip the generator whenever the Utility source is lost. If the customer desires to automatically separate from the Utility and commence isolated operation upon loss of the Utility source, additional devices will be necessary to affect the separation.

3.3.8 All protective devices supplied to satisfy these requirements shall be equipped with operation indicators (targets) or shall be connected to an annunciator or event recorder so that it will be possible to determine, after the fact, which devices caused a particular trip.

3.3.9 All protective devices supplied to satisfy these requirements shall be tested by qualified personnel at intervals at least as frequent as those used by the Utility for the relays protecting the line(s) serving the customer. This interval is currently four years for lines of 12.4kV and below. Special tests may also be requested by the Utility to investigate apparent mis-operations or to have a record of the performance for anticipated litigation.

Each routine or special test shall include both a calibration check and the actual trip of the circuit breaker from the device being tested. For each test a report shall be prepared and sent to the Utility listing the tests made and the "as found" and "as left" calibration values.

3.3.10 Projects where the customer is served from the Utility's four-wire multi-grounded neutral distribution circuit, adequate grounding must be provided to ensure neutral stability during any isolation of the line from the main system. This is necessary to avoid dangerous overvoltages on other customers served from phase-to-neutral connected distribution transformers. Adequate grounding can be provided either by the use of a wye-delta main power transformer or by installing an appropriate grounding transformer. In order to limit the effects of such grounding on the Utility's ground relay sensitivity, the Utility may require that the grounding impedance be limited to the highest value suitable for neutral stabilization.

3.3.11 Installations where surplus power sales are anticipated and for all simultaneous buy and sell arrangements, the Utility will install appropriate metering. Generators that export power to the Utility,

with the exception of Net Metered accounts, must execute a separate power sales agreement with the Utility.

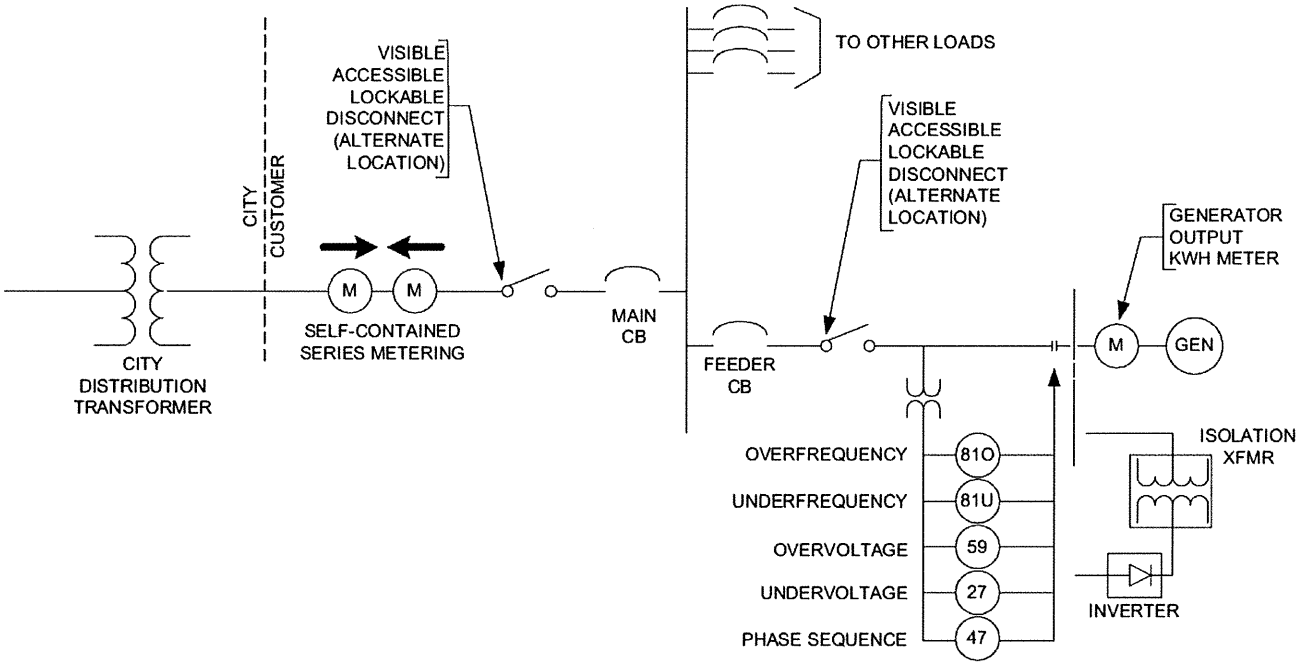
3.3.12 Telemetering equipment at the Generator Metering location may be required at the Producer's (and Customer's) expense. The Utility shall only require Telemetering to the extent that less intrusive and more cost effective options for providing the necessary data in real time are not available.

FIGURE A

CUSTOMER GENERATION INSTALLATION

(CONCEPTUAL ILLUSTRATION, NOT FOR DESIGN)

LESS THAN 100 KW



NOTES:

1. ALL MAJOR EQUIPMENT MUST BE INCLUDED ON THE CEC'S ELIGIBLE EQUIPMENT LISTS.

2. AN ISOLATION TRANSFORMER SHALL BE REQUIRED TO INTERFACE THE ENERGY SOURCE TO THE SERIES METERING EQUIPMENT FOR THREE-PHASE SYSTEMS, AND MAY BE REQUIRED FOR SINGLE-PHASE SYSTEMS AS DETERMINED BY THE UTILITY.

3. THE CUSTOMER SHALL PROVIDE, INSTALL, AND MAINTAIN THE INDICATED ENERGY SOURCE DISCONNECT EQUIPMENT.

4. THE CUSTOMER SHALL BE RESPONSIBLE FOR THE PROTECTION OF HIS EQUIPMENT AGAINST FAULTS OR OTHER SYSTEM DISTURBANCES.

5. THE VISIBLE, ACCESSIBLE, LOCKABLE DISCONNECTION DEVICE SHALL BE INSTALLED IN SUCH A LOCATION AND IN SUCH A MANNER THAT UTILITY PERSONNEL WILL HAVE ACCESS UNDER ALL CONDITIONS AND AT ALL TIMES. THE DEVICE SHALL BE CAPABLE OF BEING LOCKED IN THE OPEN POSITION USING STANDARD UTILITY LOCKS.

6. CUSTOMER MAY BE REQUIRED TO PROVIDE VOLTAGE AND FREQUENCY PROTECTION FOR GRID TIE CONNECTION IN INVERTER CIRCUITRY (REFER TO SECTION 2.5 - INVERTER SYSTEMS IN THIS GUIDLINE).

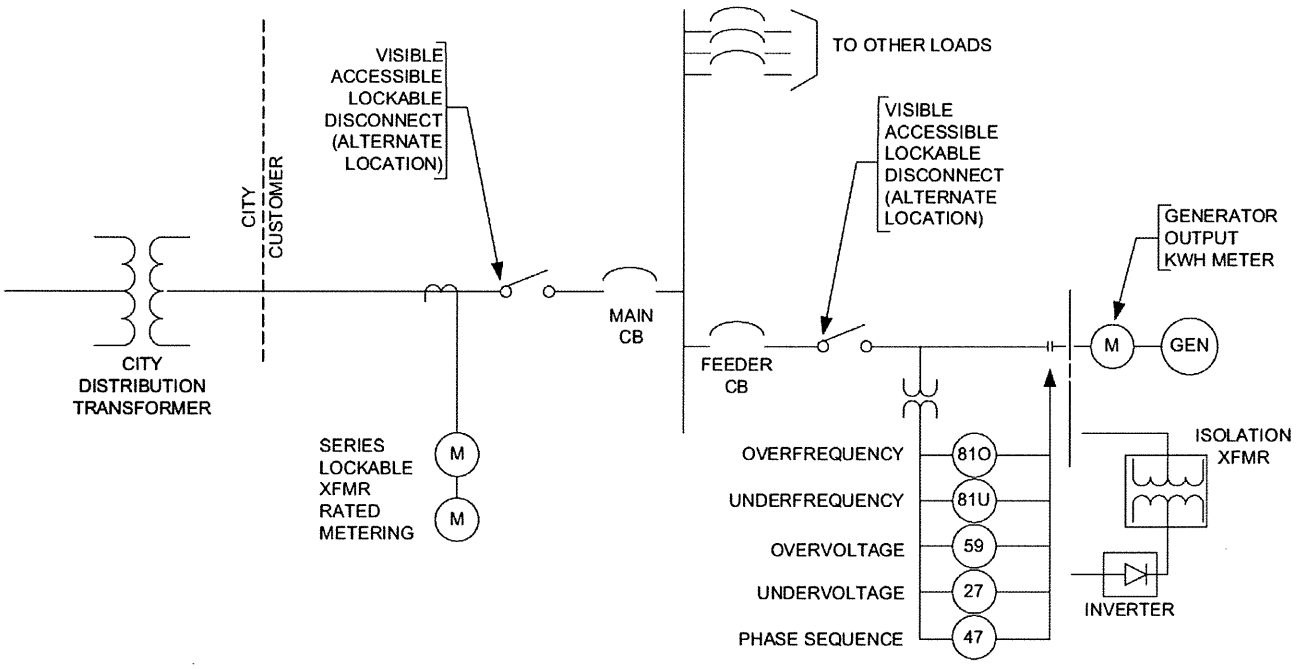
7 NET METER AND PRODUCTION METER SHOULD BE LOCATED IN SAME AREA; NET METER AND PRODUCTION METER SHALL BE LOCATED NO MORE THAN 5 FEET APART UNLESS APPROVED BY THE UTILITY.

FIGURE B

CUSTOMER GENERATION INSTALLATION

(CONCEPTUAL ILLUSTRATION, NOT FOR DESIGN)

BETWEEN 100 – 1,000 KW



NOTES:

1. ALL MAJOR EQUIPMENT MUST BE INCLUDED ON THE CEC'S ELIGIBLE EQUIPMENT LISTS.

2. AN ISOLATION TRANSFORMER SHALL BE REQUIRED TO INTERFACE THE ENERGY SOURCE TO THE SERIES METERING EQUIPMENT FOR THREE-PHASE SYSTEMS, AND MAY BE REQUIRED FOR SINGLE-PHASE SYSTEMS AS DETERMINED BY THE UTILITY.

3. THE CUSTOMER SHALL PROVIDE, INSTALL, AND MAINTAIN THE INDICATED ENERGY SOURCE DISCONNECT EQUIPMENT.

4. THE CUSTOMER SHALL BE RESPONSIBLE FOR THE PROTECTION OF THEIR EQUIPMENT AGAINST FAULTS OR OTHER SYSTEM DISTURBANCES.

5. THE VISIBLE, ACCESSIBLE, LOCKABLE DISCONNECTION DEVICE SHALL BE INSTALLED IN SUCH A LOCATION AND IN SUCH A MANNER THAT UTILITY PERSONNEL WILL HAVE ACCESS UNDER ALL CONDITIONS AND AT ALL TIMES. THE DEVICE SHALL BE CAPABLE OF BEING LOCKED IN THE OPEN POSITION USING STANDARD UTILITY LOCKS.

6. CUSTOMER MAY BE REQUIRED TO PROVIDE VOLTAGE AND FREQUENCY PROTECTION FOR GRID TIE CONNECTION IN INVERTER CIRCUITRY (REFER TO SECTION 2.5 - INVERTER SYSTEMS IN THIS GUIDELINE).

7 NET METER AND PRODUCTION METER SHOULD BE LOCATED IN SAME AREA; NET METER AND PRODUCTION METER SHALL BE LOCATED NO MORE THAN 5 FEET APART UNLESS APPROVED BY ANAHEIM PUBLIC UTILITIES.

8 POWER FACTOR CLOSE TO 0.98 LAGGING WILL BE REQUIRED AT ALL TIMES.

FIGURE C

CUSTOMER GENERATION INSTALLATION

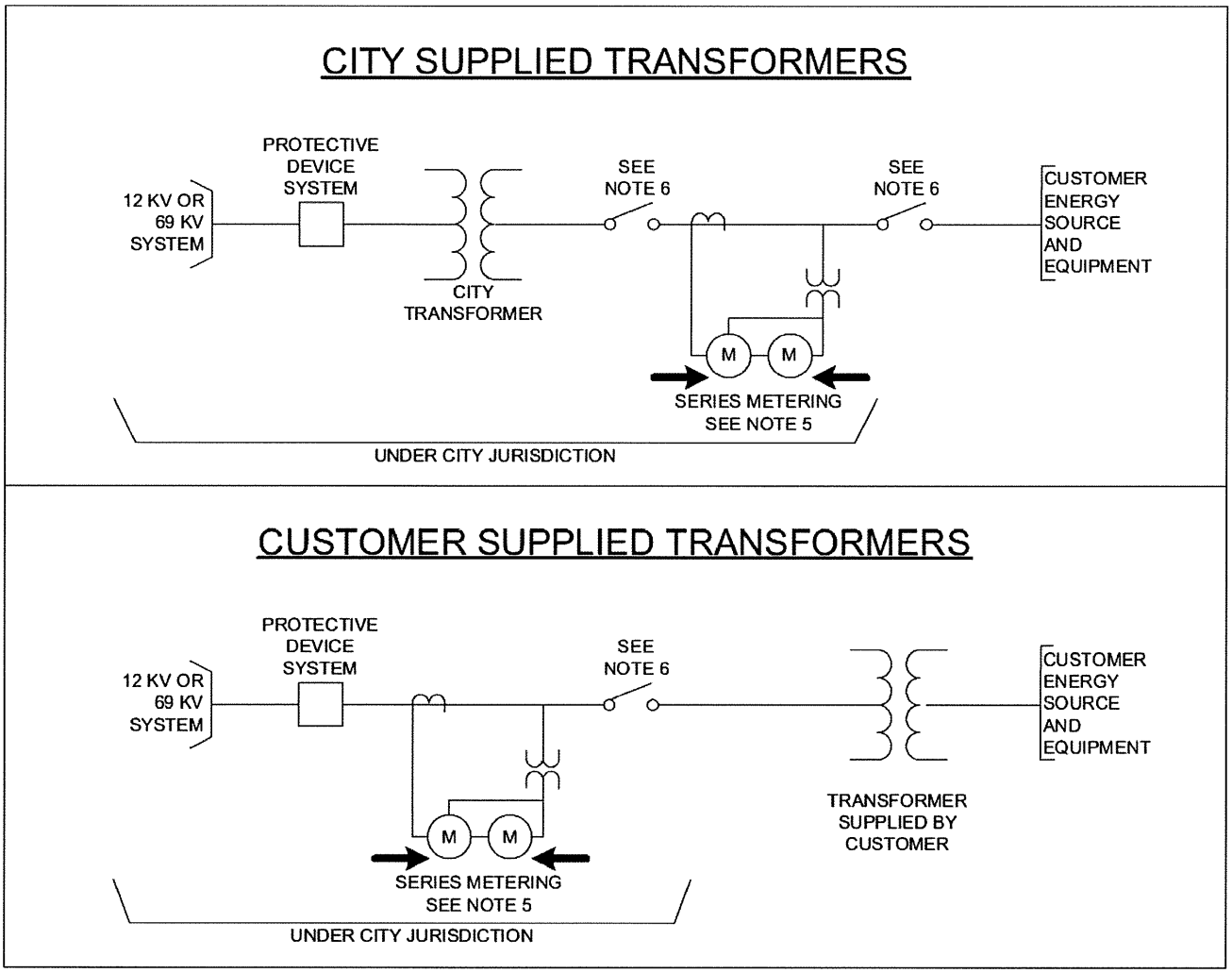
(CONCEPTUAL ILLUSTRATION, NOT FOR DESIGN)

1,000 KW AND OVER

9 MONITORING, INFORMATIONAL EXCHNAGE AND CONTROL ABOVE 500 KVA – REAL TIME MONITRING OF REAL POWER, REACTIVE POWER, VOLTAGE AND CONNECTION STATUS VIA TELEMETERY OR SCADA – RTU WILL BE REQUIRED.

10 CERTIFICATION TO PASS AN APPLICABLE NON-ISLANDING TEST WILL BE REQUIRED.

11



NOTES:

1. ALL MAJOR EQUIPMENT MUST BE INCLUDED ON THE CEC'S ELIGIBLE EQUIPMENT LISTS.

2. AN ISOLATION TRANSFORMER SHALL BE REQUIRED TO INTERFACE THE ENERGY SOURCE TO THE SERIES METERING EQUIPMENT FOR THREE-PHASE SYSTEMS, AND MAY BE REQUIRED FOR SINGLE-PHASE SYSTEMS AS DETERMINED BY THE UTILITY.

3. THE CUSTOMER SHALL BE RESPONSIBLE FOR THE PROTECTION OF HIS EQUIPMENT AGAINST FAULTS OR OTHER SYSTEM DISTURBANCES.

4. ALL ENERGY SOURCE PROTECTION SCHEMES SHALL BE DESIGNED TO BE COMPATIBLE WITH THE UTILITY EQUIPMENT PROTECTION SCHEMES.

5. METERING REQUIREMENTS ARE SUBJECT TO THE UTILITY'S APPROVAL.

6 THE CITY SHALL REQUIRE THAT THE CUSTOMER PROVIDE SUITABLE FACILITIES ON CUSTOMER PROPERTY FOR THE UTILITY TO INSTALL CABLE TERMINATIONS, DISCONNECTS, CIRCUIT BREAKERS AND TRANSFORMERS.

7 THE VISIBLE, ACCESSIBLE, LOCKABLE DISCONNECTION DEVICE SHALL BE INSTALLED IN SUCH A LOCATION AND IN SUCH A MANNER THAT UTILITY PERSONNEL WILL HAVE ACCESS UNDER ALL CONDITIONS AND AT ALL TIMES. THE DEVICE SHALL BE CAPABLE OF BEING LOCKED IN THE OPEN POSITION USING STANDARD UTILITY LOCKS.

8. NET METER AND PRODUCTION METER SHOULD BE LOCATED IN SAME AREA; NET METER AND PRODUCTION METER SHALL BE LOCATED NO MORE THAN 5 FEET APART UNLESS APPROVED BY UTILITY.

9. POWER FACTOR CLOSE TO 0.98 LAGGING WILL BE REQQUIRED AT ALL TIMES.

10. MONITORING, INFORMATIONAL EXCHNAGE AND CONTROL – REAL TIME MONITRING OF REAL POWER, REACTIVE POWER, VOLTAGE AND CONNECTION STATUS VIA TELEMETERY OR SCADA – RTU WILL BE REQUIRED.

11. CERTIFICATION TO PASS AN APPLICABLE NON-ISLANDING TEST WILL BE REQUIRED.

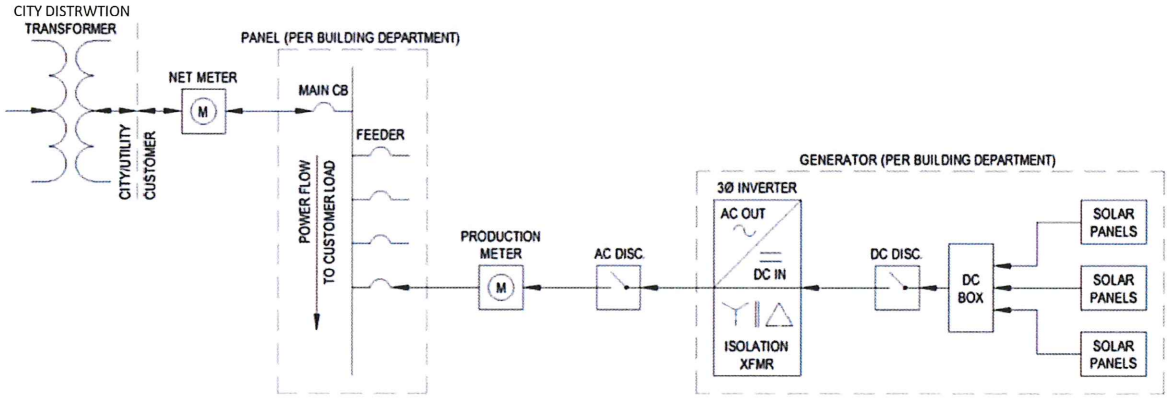
FIGURE D

CUSTOMER GENERATION INSTALLATION

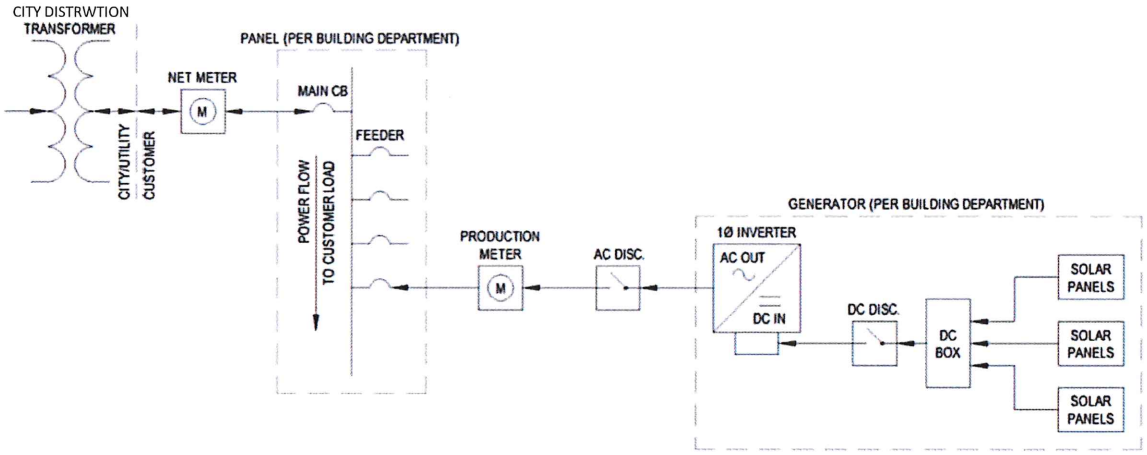
(CONCEPTUAL ILLUSTRATION, NOT FOR DESIGN

PHOTOVOLTAIC SOLAR ELECTRIC SYSTEM

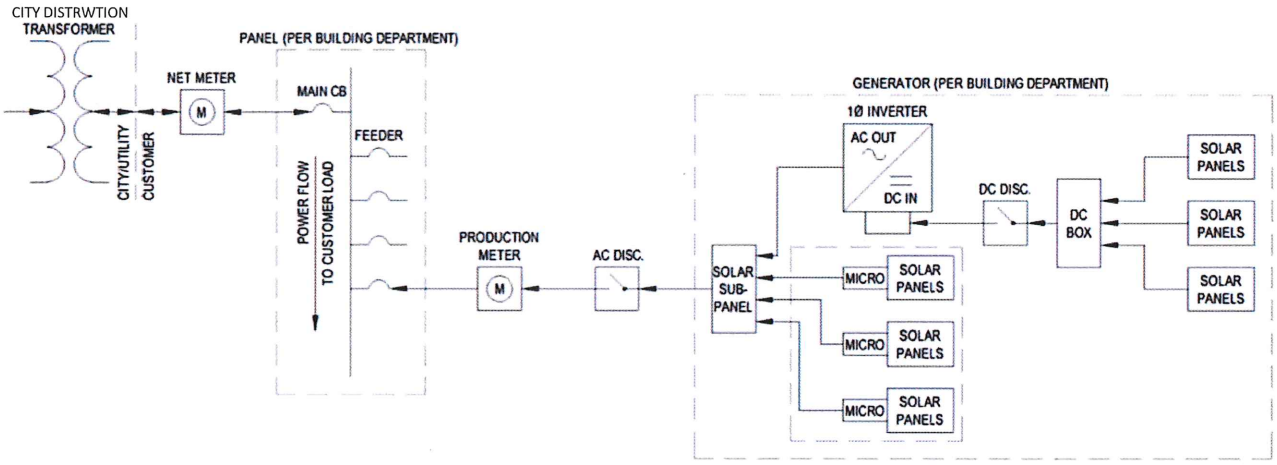
TYPICAL 3Ø COMMERCIAL PHOTOVOLTAIC SYSTEM



TYPICAL 1Ø COMMERCIAL PHOTOVOLTAIC SYSTEM



TYPICAL 1Ø /COMMERCIAL PHOTOVOLTAIC SYSTEM (OPTION TO ADD MICRO-INVERTERS)



NOTES:

1. ALL MAJOR PHOTOVOLTAIC SOLAR ELECTRIC SYSTEM COMPONENTS, INCLUDING PV MODULES AND INVERTERS MUST BE INCLUDED ON THE CEC'S ELIGIBLE EQUIPMENT LISTS.

2. THE CUSTOMER SHALL PROVIDE, INSTALL, AND MAINTAIN THE INDICATED ENERGY SOURCE DISCONNECT EQUIPMENT.

3. THE CUSTOMER SHALL BE RESPONSIBLE FOR THE PROTECTION OF HIS EQUIPMENT AGAINST FAULTS OR OTHER SYSTEM DISTURBANCES.

4. THE VISIBLE, ACCESSIBLE, LOCKABLE AC DISCONNECT DEVICE SHALL BE INSTALLED IN SUCH A LOCATION AND IN SUCH A MANNER THAT UTILITY PERSONNEL WILL HAVE ACCESS UNDER ALL CONDITIONS AND AT ALL TIMES. THE DEVICE SHALL BE CAPABLE OF BEING LOCKED IN THE OPEN POSITION USING STANDARD UTILITYY LOCKS.

5. CUSTOMER MAY BE REQUIRED TO PROVIDE VOLTAGE AND FREQUENCY PROTECTION FOR GRID TIE CONNECTION IN INVERTER CIRCUITRY (REFER TO SECTION 2.5 - INVERTER SYSTEMS IN THIS GUIDELINE).

6. POWER PRODUCTION METERING REQUIREMENTS ARE SUBJECT TO THE UTILITY'S APPROVAL. CUSTOMER SHALL FURNISH AND INSTALL METERING PANEL FOR THE POWER PRODUCTION METER. CHECK WITH THE UTILITY FOR TYPE OF METER PANEL/SOCKET.

- FOR COMMERCIAL SOLAR ENERGY SITES WITH AN OUTPUT RATING OF EQUAL TO OR LESS THAN 200A, THE POWER PRODUCTION METER REQUIRES A COMMERCIAL TYPE SERVICE PANEL WITH TEST BLOCKS

- FOR SOLAR ENERGY SITES WITH AN OUTPUT RATING OF MORE THAN 200A, THE POWER PRODUCTION METER REQUIRES A COMMERCIAL TYPE SERVICE PANEL THAT IS AT MINIMUM 400AMPS AND IS CT RATED.

- ALL SERVICE PANELS MUST MEET UTILITY SPECIFICATIONS FOR SERVICE PANEL EQUIPMENT.

- CONNECTION TO METERING EQUIPMENT FROM DISTRIBUTED GENERATION AC OUTPUT MUST BE TO THE TOP METER CLIPS OF THE POWER PRODUCTION METER.

7. NET METER AND PRODUCTION METER SHOULD BE LOCATED IN SAME AREA; NET METER AND PRODUCTION METER SHALL BE LOCATED NO MORE THAN 5 FEET APART UNLESS APPROVED BY UTILITY.

NOTICE OF EXEMPTION

To: County Clerk
County of Los Angeles
Environmental Filings
12400 East Imperial Highway #2001
Norwalk, CA 90650

From: Industry Public Utilities
15625 Mayor Dave Way, Suite 100
City of Industry, CA 91744

Project Title: Revision of the IPU Schedule of Electric Rates and Rules for Electric Service

Project Location - Specific: IPU Service area

Project Location-City: City of Industry **Project Location-County:** Los Angeles

Description of Project: This involves revising the schedule of electric rates for electric service provided to customers by Industry Public Utilities to add Net Energy Metering and Eligible Renewable Generation Rate Schedules and Rule 21.

Name of Public Agency Approving Project: Industry Public Utilities

Name of Person or Agency Carrying Out Project: Industry Public Utilities

Exempt Status: *(check one)*

☐ Ministerial (Sec. 21080(b)(1); 15268);

☐ Declared Emergency (Sec. 21080(b)(3); 15269(a));

☐ Emergency Project (Sec. 21080(b)(4); 15269(b)(c));

☑ Categorical Exemption. *State type and section number:* 15273 and 15061

× Commonsense Exemption. *State code number: 15061*

Reasons why project is exempt: The proposed project is exempt from the California Environmental Quality Act ("CEQA") per Section 15273 of the CEQA Guidelines. Per Section 15273, such fees, and rates for the purposes of meeting the operating expenses of the municipal electricity enterprise are exempt. The proposed project is also exempt from CEQA per Section 15061 of the CEQA Guidelines. Per Section 15061, the revised Schedule of Rates has no foreseeable potential to result in a significant impact upon the environment.

Lead Agency

Contact Person: Mathew Hudson Telephone: (626) 333-2211

Signature: _____ Date: January 12, 2023

Title: Engineering Manager