

CITY OF INDUSTRY
RENEWABLE ENERGY RESOURCES PROCUREMENT PLAN
& ENFORCEMENT PROGRAM (SBX1 2)

1. POLICY STATEMENT

California's Renewable Portfolio Standard (RPS) requirements for publically owned utilities (POU) such as the City of Industry (the "City" or "COI"), has been established through dynamic and meaningful legislative and regulatory change over the past ten years. The current law, the California Renewable Energy Resources Act, Senate Bill 2 1st Ex Session ("SBX1 2") requires utilities to achieve 33% RPS by 2020, with interim targets of an average of 20% through 2011-2013 and 25% by 2016 and 33% by 2020. SBX1 2 requires POUs to prepare a renewable energy resources procurement plan and gives the California Energy Commission (CEC) new oversight responsibilities with respect to POUs.

The City of Industry shall work with the CEC to develop a renewable energy resources procurement plan that meets California's legislative intent while taking into consideration the burdensome changes imposed by the most recent legislation, market limitations for small utilities, the impact of RPS on rates and COI's financial resources. The City shall comply with the intent of the statute, some of which are open to interpretation in order to help POUs address their unique circumstances. The governing board's reasonable interpretation of the statute is provided herein. As long as COI's electric utility ("IPUC") acts in accordance with its governing board's reasonable interpretation, CEC should hold IPUC in compliance with SBX1 2.

This document describes IPUC's renewable energy resources procurement plan and enforcement program as required by PUC §399.30(e). The City Council is IPUC's governing board, responsible for adopting, implementing and enforcing the renewable energy resources plan and enforcement program.

2. IPUC RENEWABLE ENERGY RESOURCES PROCUREMENT PLAN

2.1 Renewable Portfolio Standard (RPS) Minimum Targets

Pursuant to SBX1 2 and codified under PUC §399.30, IPUC shall adopt and implement a renewable energy resources procurement plan to procure a minimum quantity of electricity products from eligible renewable energy resources, including renewable energy credits or RECs. The City Council requires IPUC to meet the overall RPS compliance targets specified under PUC §399.30(c)(1&2) for each compliance period. In meeting the targets, IPUC will contract for eligible renewable energy resources on a least cost, best fit basis that takes into account availability of resources, financial feasibility, transmission availability, competitive market availability and other relevant considerations.

IPUC has taken proactive steps to achieve and maintain RPS targets established by prior legislation SB1078 and SB 107. Due to the change in the eligibility of renewable energy caused by SBX1 2, IPUC shall be exempt from the specific portfolio content category percentages defined by PUC §399.16(c) for Compliance Period 1. Consistent with PUC §399.15(b)(5), the legislation authorizes IPUC's governing board, the City Council, to waive specific compliance requirements caused by conditions beyond the control of IPUC. IPUC will however, be required to attain its RPS minimum targets with reasonable progress which IPUC interprets as taking proactive steps in achieving and maintaining the RPS percentage targets required under SBX1 2.

2.2 Reasonable Progress in Renewable Energy Resources Procurement

The original 2002 RPS legislation gave POUs broad flexibility with RPS. Since 2005, the City has initiated broad efforts to procure renewable energy resources including acquiring an ownership interest and developing California based renewable energy resources.

- In December 2005, the City entered into an MOU to acquire a 2 MW interest in a Tehachepi wind energy resource from an independent power producer (IPP). The 2 MW wind resource could meet 20% of IPUC's retail sales. The City was unable to procure the resource due to interconnection issues, inadequate transmission capacity and inability to dynamically schedule 2 MW from an intermittent resource within the CAISO to the City's Point of Receipt.
- In 2009, the City began development of a 2 MW solar carport and electric vehicle (EV) charging project at the Industry MetroLink station. The renewable resource was planned to interconnect within the City's electric distribution system.
- On January 1, 2010, IPUC entered into a 5-year contract with Shell Energy Trading. The power content label of the Shell power supply contains 20% "Eligible Renewable" energy resources, 19% from wind and 1% from small hydroelectric. For

a small utility such as the City whose peak load is approximately 8 MW, the integration of renewable resources within its wholesale power block was the most feasible RPS resource procurement option.

- Because the City had already contracted for 20% of its renewable requirement in its 5-year wholesale contract, on July 26, 2010, the City entered into a 20-year PPA with SCE (RAP ID# 5371) and began selling 100% of the 2 MW solar output to SCE beginning March 2012. At the end of contract term, the IPUC will take the 3,000 MWh/yr RPS supply. The project's EV Charging facilities are energized and an EV Lease Program for commuters shall commence in 2013. Given the explicit flexibility provided by RPS legislation prior to SB 2 (1X), the City's strategy is to reduce its carbon footprint by promoting EV transportation and has invested significant financial resources to install an EV charging infrastructure at MetroLink.

2.3 Grandfathering of Resource

By contracting for "eligible renewable" resources integrated as part of IPUC's power supply until 2015, the City procured the least-cost and best-fit electricity product consistent with PUC§399.16(b). The contracts are renewable and deemed to be eligible for grandfathering. As the grandfathered resources count toward IPUC's RPS targets, they do not need to be consistent with the portfolio content category percentages described in Section 2.4. As content categories had been established after IPUC had contracted for its RPS resources through 2015, for Compliance Period 1, IPUC's RPS procurement is exempt from portfolio content category percentages in Compliance Period 1 consistent with noncompliance waivers set forth in Section 3.2. IPUC must however procure the minimum quantity of eligible renewable energy resources for each compliance period as set forth in PUC §399.15(b)(2)(B). Eligible Renewable Energy Resources ("ERR") shall be certified by the CEC and are defined in PUC §399.12. IPUC must also participate in and comply with the verification and audit process administered by the Energy Commission PUC §399.30(i)(2).

2.4 Portfolio Content Categories ("Buckets")

SB 2 (1X) imposes a "loading order" that requires each provider to acquire a portfolio of renewables comprised of three categories. The three categories of renewable resources (referred to as "buckets") are defined in PUC §399.16(c). The City is a uniquely small POU who cannot access all three categories. To accommodate its market limitations, for the purposes of compliance, the portfolio content categories are defined as follows:

- i) Category 1 - Direct connection to a California balancing authority, scheduling without substitution and dynamically transferred energy. "California Content" (ex. MetroLink PV delivering to CAISO grid at SCE's Walnut substation, scheduled by SCE and integrated in the CAISO markets.)
- ii) Category 2 – Firm and shaped energy or RECs from eligible resources providing

incremental electricity and scheduled into a CA balancing authority. (ex. Northwest wind power shaped by Bonneville Power Administration delivered to CAISO grid at the California Oregon Border or COB)¹.

- iii) Category 3 – All other renewable resources including unbundled renewable energy credits (RECs) referred to as the “REC Content”.

2.5 Compliance Requirements [PUC§399.30]

IPUC does not establish annual compliance obligations for any specific year within Compliance Periods 1, 2 and 3. However, IPUC has set annual procurement targets that will be used to determine the total Compliance Period Requirements for each Compliance Period. Consistent with PUC §399.30(c)(1&2), IPUC’s RPS procurement requirements for each compliance period are summarized as follows:

2.5.1 Total Compliance Period Requirements

- Compliance Period 1: January 1, 2011 through December 31, 2013. Required to procure 20% of average retail sales throughout the period from eligible renewable energy resources without regard to the categories defined by PUC §399.16(c) and described in Section 2.4 herein.
- Compliance Period 2: January 1, 2014 through December 31, 2016. Required to procure 25% of average retail sales from eligible renewable energy resources by December 31, 2016.
- Compliance Period 3: January 1, 2017 through December 31, 2020. Required to procure 33% of average retail sales from eligible renewable energy resources by December 31, 2020.

2.5.2 Portfolio Content Category Compliance Requirements

IPUC has defined the portfolio content categories specified in PUC §399.16(c) in Section 2.4 of the enclosed Renewable Energy Resources Procurement Plan. Subject to Section 2.4 herein, IPUC shall meet the limits on procurement for the portfolio content categories as described in the table below. IPUC’s governing board may adjust the percentage limitations specified in PUC §399.16(c) for procurement in each category in order to comply with the obligation for a compliance period in which the conditions for waiving compliance established in Section 3.1 would otherwise be invoked. Additionally, IPUC shall determine to which category each procured resource belongs.

¹ BPA integrates highly variable wind energy generated from Northwest wind resources into its Federal Columbia River Hydroelectric System so that a firm, shaped power supply (ex. constant 25 MW power supplied for 16 On-Peak hours per day) can be scheduled in advance and delivered to COB. Here a buyer can procure in advance a firm block of wind energy, despite the highly variable manner that wind energy is actually generated.

IPUC RPS Compliance Requirements

Compl. Period	% Retail Sales	Category 1	Category 2	Category 3
2011 - 2013	20% average	(see §2.3)	25%	75%
2014 - 2016	25% at YE16	≥ 65% ¹	≤20%	≤15%
2017 - 2020	33% at YE20	≥ 75% ¹	≤15%	≤10%

¹ IPUC initial Category 1 RPS Compliance Requirement set equal to Category 1 content requirement set forth in PUC §399.16(c)(1).

2.6 IPUC RPS Procurement Plan Elements

To comply with PUC §399.30(c)(2), IPUC intends to demonstrate reasonable progress in attaining the goals of SBX1 2. IPUC has and will continue its extensive efforts to procure or develop renewable resources. When reviewing its RPS procurement needs, IPUC conducts an assessment of its supply and demand. Each year, IPUC prepares a Power Supply Forecast, which is a forward projection of supply and demand. IPUC's RPS procurement requirements are estimated from the Power Supply Forecast and are summarized in the follow table:

Table 1: IPUC RPS Procurement Requirements

Compl. Period	Year	Peak Demand	Retail Sales	RPS Target	
		MW	MWHs	MWHs	Note
	2010	7.20	27,306		
1	2011	7.26	27,679		3-yr total
	2012	7.32	27,304	16,512	
	2013	7.39	27,577		
2	2014	7.46	27,853	6,963	
	2015	7.54	28,131	7,033	
	2016	7.61	28,413	7,103	YE-2016
3	2017	7.69	28,697	9,470	
	2018	7.77	28,984	9,565	
	2019	7.84	29,274	9,660	
	2020	7.92	29,566	9,757	YE-2020

IPUC's RPS procurement is calculated on a calendar year basis. The RPS percent is calculated based on the total MWHs of renewable resources (procured, contracted or in development) for a calendar year divided by calendar year retail sales. As shown in the above table, the RPS Target for Compliance Period 1 is calculated using the summation of 2011, 2012 and 2013 forecasted retail sales, while the RPS Target for Compliance Period 2 & 3 is calculated annually based on forecasted retail sales.

Attached below is IPUC’s most recent “Resource Procurement Plan”. Pursuant to §399.30(g), IPUC will provide the City Council with an updated “Resource Procurement Plan,” annually.

Table 2: IPUC Resource Procurement Plan Summary

Period	Year	Retail Sales		Non RPS Purchases		RPS Target		
		Pk Dmd MW	Energy MWHs	Forward MWHs per Yr	Spot MWHs per Yr	Cat 1	Cat 2	Cat 3
1	2013	7.39	27,577	14,750	12,827		4,500	12,012
2	2014	7.46	27,853	14,750	8,577	4,526	1,393	1,044
	2015	7.54	28,131	14,750	8,810	4,571	1,407	1,055
3	2016	7.61	28,413	12,500	11,296	4,617	1,421	1,065
	2017	7.69	28,697	12,500	10,905	5,292	1,420	2,757
	2018	7.77	28,984	12,500	10,516	5,967	1,435	2,163
	2019	7.84	29,274	12,500	10,131	6,643	1,449	1,569
	2020	7.92	29,566	12,500	9,749	7,318	1,464	976

IPUC has comprehensively reviewed options to meet its RPS targets. For Compliance Period 1, IPUC’s options to procure renewable resources have been limited. Procuring Category 1 (“Cat 1”) renewable resources has been particularly problematic due to the small quantities required by IPUC, the dynamic scheduling requirement and regulatory uncertainty in characterizing specifications for Category 1 & 2. In Compliance Period 1 the minimum purchase volume for Cat 1 was found to be 25,000 MWHs, 3 times greater than IPUC’s aggregate Cat 1 RPS target for years 2011-13. Contracting for Category 1 resources in the emerging renewable market of Compliance Period 1 has been prohibitively expensive, and would negatively impact rate payers. While similar, but less severe issues pertain to Category 2, IPUC shall fully procure its Category 2 RPS target. Category 3 renewable resources are currently available for the small quantities required by IPUC and their pricing is such that they are currently financially viable for the City’s rate payers. Consistent with the noncompliance provisions set forth in §3.2 of this Plan, IPUC has met its RPS Target via Cat 2 & Cat 3 purchases for Compliance Period 1 as provided in Table 2.

Looking ahead to Compliance Periods 2 & 3, IPUC believes that it has sufficient time to procure its RPS content category amounts as set forth in PUC §399.16(c). To address its small quantities, IPUC is currently negotiating the procurement for its full period compliance volume, which are closer to minimum RPS transaction volumes required in the marketplace. Concurrent with IPUC’s ongoing solicitation for Category 1, Category 2 and Category 3 renewable resources, IPUC shall work closely with the Southern California Public Power Authority (SCPPA) Renewable Resources Working Group in their

bid solicitation (RFP) process for securing renewable resources. Several times a year, The SCPPA Renewable Resources Working Group sends out RFPs for long term renewable resources. One of the potential SCPPA projects is the development of Tehachapi wind assets, which the City has already initiated discussions and has completed a preliminary review of. IPUC has also initiated efforts to develop rooftop PV on buildings within its service territory and a ground mount PV project located on a parcel that could be interconnected directly with the City's distribution facilities. All PV projects would deliver energy directly to IPUC's distribution facilities.

IPUC shall continue to conduct a thorough analysis of the risk of delay or failure associated with renewable resources contracted or projects under development. Its integrated resource planning (IRP) group shall discuss on a regular basis the viability of contracts or projects.

2.7 Reporting Requirements

Per SBX1 2, IPUC will provide the CEC documentation and reports, as required in PUC §399.30(g) and PUC §399.30(i).

2.8 Banking

Due to minimum RPS contract sizes in the current market relative to IPUC's RPS requirements, IPUC shall likely procure excess RPS resources in order to comply within a particular compliance period. Pursuant to PUC §399.13(a)(4)(B), IPUC can accumulate excess procurement of eligible resources in one compliance period to be applied to any subsequent compliance period.

2.8 Cost Limitations and Constraints [PUC§399.30(d)(3)]

IPUC shall establish specific cost limitations on procurement to ensure that compliance with the RPS standards does not materially increase rates as IPUC has limited ability to raise rates. Before raising rates, IPUC staff reviews the competitiveness of its rates, the rate impact on its customers and obtains input from the public (via sufficient public notice and rate workshops). Only the City Council is authorized to raise rates, who, consistent with PUC §399.15(c), may establish cost limitations for procurement expenditures.

3. ENFORCEMENT PROGRAM

3.1 Enforcement Action

Subject to the conditions for waiving compliance, the City Council may take enforcement action if IPUC fails to meet the compliance obligation for a compliance period as set forth in Section 2.5. In the event that an enforcement action is required, the City Council shall direct the City Engineer to develop and present a plan within 6 months to bring IPUC into compliance.

3.2 Waiver for Noncompliance

IPUC's Governing Board may waive enforcement of a Compliance Period Requirements for a particular compliance period if any of the following conditions occur that prevent compliance and it is demonstrated that IPUC took reasonable actions to comply and the conditions were beyond the control of IPUC:

- Legislative or regulatory actions that change the eligibility of energy already procured or contracted for;
- Permitting, interconnection, or other circumstances that delay procured eligible renewable energy resource projects;
- Inadequate transmission capacity to allow for sufficient electricity to be delivered;
- Unanticipated curtailment of eligible renewable energy resources that limit renewable energy deliveries to IPUC;
- Contract failures or other circumstances that delay procured eligible renewable energy resource projects.
- An insufficient supply of eligible renewable energy available within the cost limitations set forth in Section 2.8.

IPUC intends to comply with SBX1 2. However, as listed above, there may be circumstances that will prohibit IPUC from procuring renewable resources to meet the targets in SBX1 2. In such an instance, IPOUC will request the City Council authority to approve a waiver of compliance, consistent with PUC §399.15(b)(5).