SAN JOSE IRP July 16, 2018 Clean Energy Community Advisory Commission



General Requirements

Load Serving Entities (LSE) must file with the California Public Utilities Commission (CPUC) Integrated Resource Plans (IRP).

- Applicable state law: Public Utilities Code Sections 454.51 and 454.52.
- Applicable CPUC decisions: CPUC Decision 18-02-018 (Feb 2018) and subsequent rulings in docket R.16-02-007.
- LSEs include Investor Owned Utilities or IOUs (PG&E, SCE and SDG&E), Community Choice Aggregators (CCAs), and Energy Service Providers (ESPs).)



What is an IRP?

An IRP is a plan to meet an LSEs' electricity needs. It includes:

- a forecast of the LSE's load; and
- a forecast of the resources that the LSE already has or intends to procure to meet that load including LSE owned generating plants, contracts with third party generating plants, storage, energy efficiency, distributed generation, etc.



CPUC IRP Process

- The IRP process will allow the CPUC to ensure:
 - that bulk power system has sufficient resources to operate reliably, and
 - that the electric sector that is subject to the CPUC's jurisdiction will meet its share
 of the greenhouse gas emission (GHG) reductions that the California Air Resource
 Board (CARB) has assigned to it.
- If the CPUC finds, after aggregating all plans submitted by LSEs, that these goals will not be achieved it may direct the IOUs to buy additional resources or change their procurement as necessary to do so and could impose the costs of this procurement on all LSEs.
- The IOUs must show they will meet the needs of their customers in a least-cost best-fit manner.
- CCAs need not disclose the costs but must provide a narrative that indicates that the IRP will result in reasonable rates for CCA customers.



The Mechanics

- D.18-02-018 requires that LSEs file IRPs in even years, by August 1 in 2018 and by May 1 thereafter.
- During odd years the CPUC will develop key assumptions that LSEs must use to prepare their IRPs. This includes developing a Reference Case that identifies projected resources, loads, transmission capacity etc.
- LSEs must develop at least one conforming plan. This conforming plan must use the load forecast developed by the California Energy Commission (CEC) for that LSE and must incorporate the assumptions from the CPUC Reference Case.
- LSEs may develop alternative plans that deviate from CEC load projections and Reference Case assumptions but if they do so, they must explain and justify the deviations.



Fundamental 2018 IRP requirements

- The IRPs must demonstrate how the LSE will meet its electric needs and its GHG reduction obligations.
- LSEs must project their Load and Resources on an annual basis from 2018 through 2030.
- Load Includes projected electricity usage by customers including MWh (energy) and MW (peak demand or maximum usage at any time during a defined time period), modified to reflect energy efficiency (measures to reduce energy usage), demand-side management (measures to change the timing of energy usage), and customer installed-behind-the-meter distributed generation (e.g. customer owned photovoltaic panels).
- Resources include LSE-owned generation, contracts with third party generators, imports, storage.



Reliability

- Using the assumptions in the Reference Case, LSEs must determine whether their selected resource portfolio can be delivered reliably to their load, taking into account the characteristics and location of generating resources, loads and transmission capacity.
- The CPUC will aggregate all plans and determine whether the system can accommodate the combined plans of all LSEs and may require modifications as necessary to maintain reliability.



GHG

- CARB has identified the GHG reductions required of LSEs subject to the CPUC's jurisdiction and the CPUC has allocated these reductions proportionally to these LSEs, and developed a GHG benchmark for each LSE.
- Based on CARB work, the CPUC adopted a combined goal of 42 million metric tons (MMT) by 2030 for its LSEs.
- The CPUC has developed a GHG price that is meant to represent the cost of GHG emissions.
- The CPUC has developed a GHG calculator that calculates the GHG emissions of the portfolio selected by each LSE.
- The CPUC calculator only credits LSEs for GHG free energy that matches the load of the LSE and GHG free energy that displaces fossil fuel. This means that an LSE will not get credit for all the GHG free power.



Disadvantaged Communities

- LSEs must assess and report on how their IRPs will affect disadvantaged communities. This includes
 - identifying the disadvantaged communities within their service areas,
 - assessing the impacts of their chosen plan on these communities, and
 - describing what steps the LSE will take to reduce or eliminate those impacts.
- LSEs must list as disadvantaged communities all communities that have a 75% or more rating using the California Office of Environmental Health Hazard Assessment (OEHHA) CalEnviroScreen 3.0 tool. LSEs may list additional communities.
- LSEs must report on GHG emissions and criteria air pollutant impacts on disadvantaged communities.



Disadvantaged Communities

- The following zip codes represent the disadvantaged communities in San José as determined by CalEnviroScreen 3.0: 95110, 95111, 95112, 95116, 95122, 95131, 95133.
- There is citywide concern that the CalEnviroScreen tool does not account for certain areas of San José that are known to be lowincome, such as areas in the east side of San José.
- SJCE is assessing various data sets to determine which additional communities should be designated as disadvantaged.



San José's 2018 IRP

- SJCE is working with consultants to develop a plan. Because SJCE has not yet procured resources, the plan is primarily prospective.
- On 6/26, the City Council:
 - Adopts 2018 SJCE Criteria;
 - Authorizes the City Manager to file SJCE's 2018 IRP with the CPUC on August 1;
 - Provides that SJCE will submit an updated IRP for approval to City Council no later than March of all even numbered years.
- 2018 SJCE Criteria are based on 2017 SJCE Implementation Plan and 2018 Climate Smart San Jose.
- On 7/16 SJCE updates Clean Energy Community Advisory Committee (CECAC).
- On 8/1 SJCE files the IRP with the California Public Utilities Commission.
- Subsequent processes will be more extensive and provide for more public participation.



San Jose IRP Criteria

- The 2018 SJCE IRP criteria are based on SJCE's previously approved implementation plan and Climate Smart San Jose. These plans detailed the policies and goals for SJCE.
- SJCE will phase in service to San Jose residents and businesses as follows:
 - September 2018 municipal load;
 - March 2019 remaining load.
- SJCE will offer at least one power mix option with a rate equal to or less than PG&E's rates.
- SJCE will offer at least one power mix option at 10 percent or more renewables than PG&E.
- SJCE will offer at least one power mix option that is 100 percent renewable.
- SJCE will offer at least one power mix option with a rate equal to or less than PG&E's rates.
- SJCE will offer at least one power mix option at 10 percent or more renewables than PG&E.



San Jose IRP Criteria

- SJCE will offer at least one power mix option that is 100 percent renewable.
- S JCE's initial resource mix will include a proportion of renewable energy exceeding California's prevailing Renewable Portfolio Standard (RPS) procurement mandate.
- By 2021, SJCE's residents will have a base power mix that is 100% Greenhouse Gas emissions (GHG) free.
- SJCE will maintain, at minimum, low income programs at the same level as PG&E.
- After becoming established, SJCE will develop local programs including energy efficiency, demand response, distributed generation and renewable energy.
- SJCE will encourage distributed renewable generation in the local area through the offering of a net energy metering tariff; a standardized power purchase agreement or "Feed-In Tariff'; and other creative, customer-focused programs targeting increased access to local renewable energy sources.



San Jose IRP Criteria

- By 2030, SJCE's base offering will be at least 60% renewable.
- By 2030, San Jose will have 668MW of local renewables and by 2040, San Jose will be the
- world's first one GW solar city.
- By 2030, 60% of all passenger vehicles in the City will be electric.
- By 2020, 100 percent of new homes will be ZNE, and by 2030, 25 percent of existing homes
- will be energy efficient and all-electric.
- SJCE will comply with all applicable State Law including the Renewable Portfolio Standard,
- Resource Adequacy requirements, and GHG reduction requirements.
- SJCE's IRP shall comply with the CPUC's requirements with respect to
- disadvantaged communities including identifying the disadvantage communities SJCE will serve, describing the impacts of such service on the disadvantaged communities, and setting forth SJCE's plans to benefit these communities.



Questions?

