

IRP COMMUNITY

MEETING #1:

IRP 101



WATER AND
POWER

April 20, 2023

Presented by:

Mandip Samra, Assistant General Manager
Power Supply Division, Burbank Water
and Power



Agenda

- BWP overview
- Rules and regulations
- 2019 IRP overview
- 2024 IRP changes
- Tools & technology



What is an IRP?

Long term power supply planning for resources, transmission, renewable energy compliance and greenhouse gas compliance.

The study term is 2024-2045.



BURBANK WATER AND POWER

Overview

BWP: Mission and Values

Mission

- We are committed to safely providing reliable, affordable, and sustainable utility services for our community.

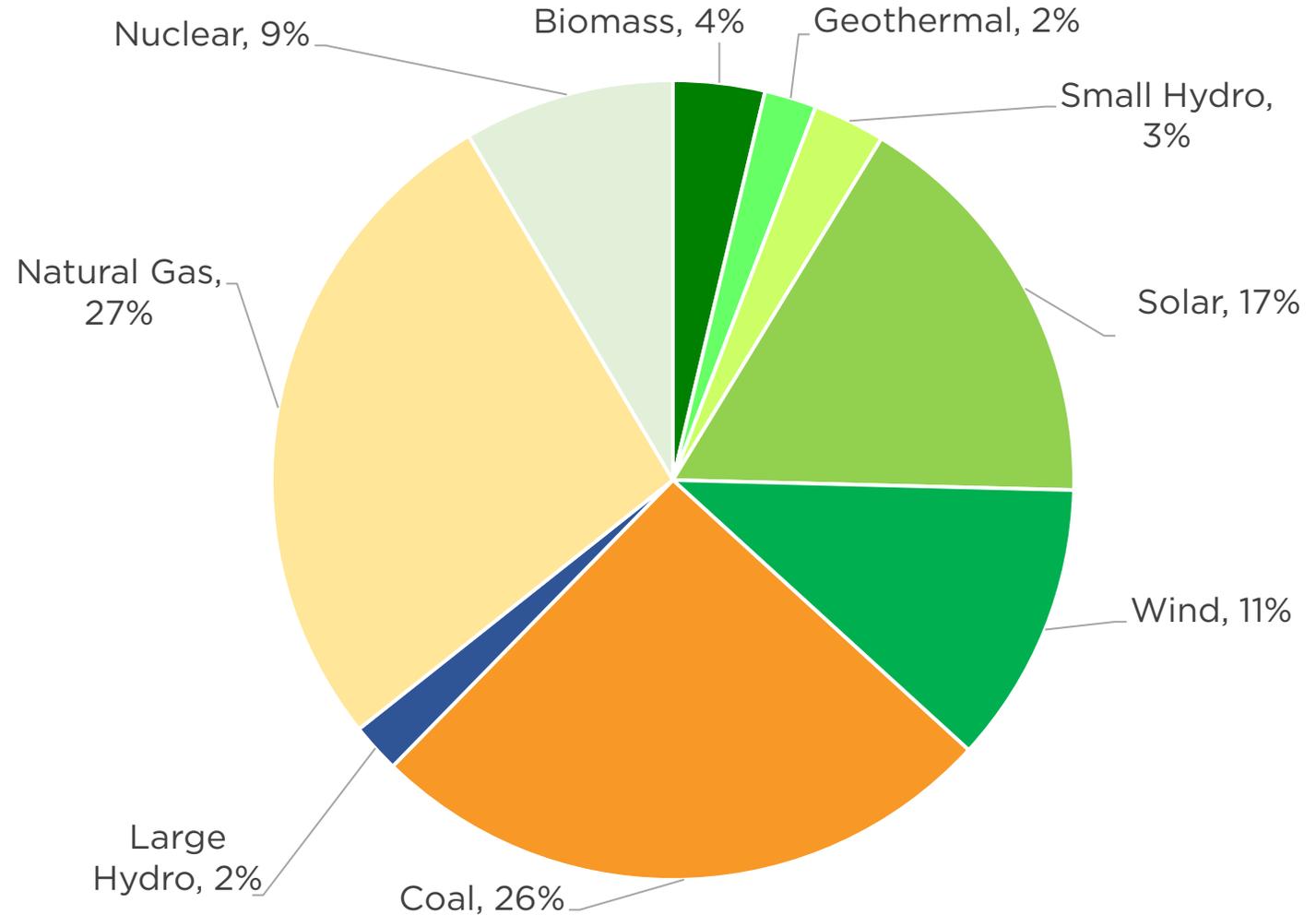
Values

- Find a way
- Continuously improve
- Include others
- Be respectful.
- Deliver the future



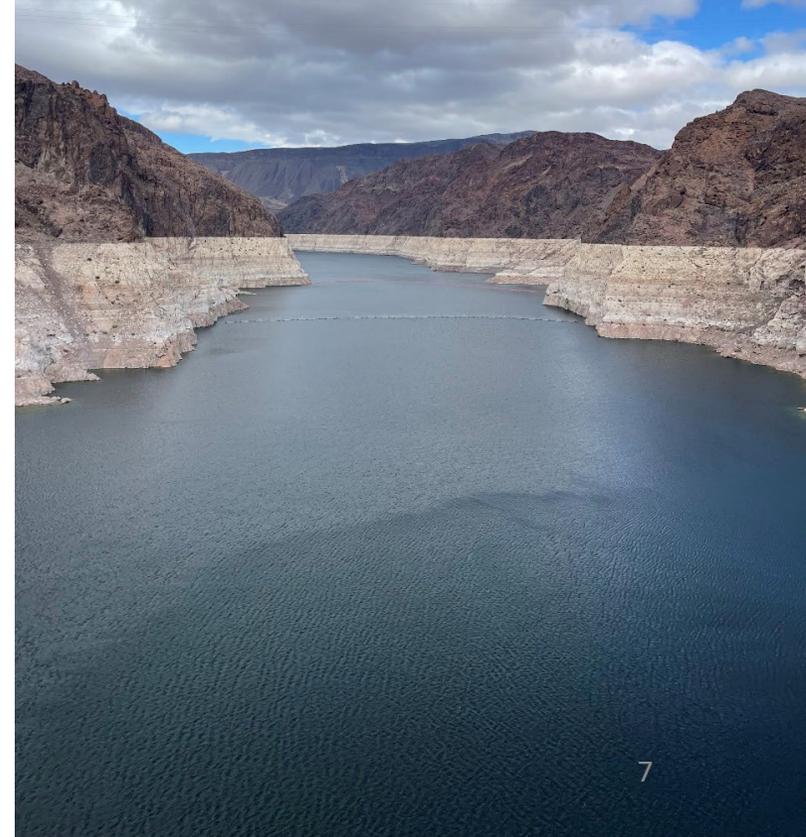
Procurement Mix – Power Content Label 2021

In 2022, 38.5% of our resource mix was renewables by the end of 2023, we will be at 41.25% renewables



Burbank IRP Objectives

- Need to find a balance between:
 - Reliability
 - Keeping the lights on and meeting compliance requirements
 - Cost
 - Quality services at reasonable costs
 - Sustainability
 - Greenhouse gas (GHG) reductions
 - Renewable Portfolio Standard (RPS)



CALIFORNIA RULES AND REGULATIONS

- **Renewables**
- **IRP Mandates**

Renewable Portfolio Standard

Law	Details
Senate Bill (SB) X1-2 (2011)	33% Renewable Portfolio Standard (RPS) by 2020
SB 350 (2015)	33% RPS by 2020 50% RPS by 2030 IRP Requirement
SB 100 (2018)	60% RPS by 2030 100% zero carbon resources by 2045

Penalties for BWP non-compliance are estimated at \$147 million





SENATE BILL (SB) 100

SB 100 signed into law on September 10, 2018

	Compliance Period 3		Compliance Period 4	Compliance Period 5	Compliance Period 6	Compliance Period 7+
California RPS mandatory procurement requirement (% of net retail sales)	YEAR	%	Calendar year (CY): 2021-2024 44% by 12/31/2024	CY: 2025-2027 52% by 12/31/2027	CY: 2028-2030 60% by 12/31/2030	CY: 2031+ (3-year blocks) 60% post 2030
	2017	27.0%				
	2018	29.0%				
	2019	31.0%				
	2020	33.0%				
Portfolio content category (PCC) 1 minimum:	75% or more of net procurement requirement					
PCC 2 maximum:	25% or less of net procurement requirement (note in order to maximize PCC 3 use, BWP would use a maximum of 15% PCC 2.)					
PCC 3 maximum:	10% or less of net procurement requirement					
Long-term contract requirement:	N/A		At least 65% of contracts must be long-term contracts (at least 10 years or more in duration).			

SB 350 Requirements

- Mandates an IRP for utilities with load > 700 giga-watt hours
- There are 16 publicly owned utilities in CA that need to develop and IRP
- The California Energy Commission (CEC) IRP template under review
- IRP is due before 1/1/24
 - IRP written document/report
 - 4 required tables
 - Supplemental information



SB 350 Requirements (cont.)

- Due (and approved) before 1/1/24
 - At least one planning scenario that meets the POU IRP requirement
 - 60% RPS by 2030
 - 40% reduction in greenhouse gases by 2030
 - Scenarios based on GHG target setting as approved by the California Air Resources Board (CARB) Scoping Plan



SB 350 Requirements (cont.)

4 Required Tables

Table Name	Details
Capacity resource accounting table (“CRAT”)	Annual peak capacity demand in each year and energy of each resource
Energy balance table (“EBT”)	Annual total energy demand [peak load and total load] and supply from resources
RPS procurement table (“RPT”)	POU resource plan, by resource type, to meet RPS
GHG emission accounting table (“GEAT”)	Emissions by resource type [resource data must match EBT]



SB 350 Requirements (cont.)

Supplemental information requirements (includes, but is not limited to, the following)

Topic	Details
RPS	Detail on how RPS procurement plan was prepared (can attach RPS Policy document)
Energy efficiency (EE) and demand response (DR)	Analysis of EE & DR and impacts to load
Energy storage (ES)	Evaluate ES (can include AB 2514 documents)
Transportation electrification (TE) procurement	Details on TE program and how TE is evaluated
Reliability & capacity	Discuss reliability & capacity requirements
Transmission/Distribution (T/D)	ID any constraints to T/D System and discussion of bulk transmission system
Retail rates	Rate impact analysis
Disadvantages Communities (DACs)	Identify current and new programs with priority on DACs and GHG reductions



2019 IRP OVERVIEW

Burbank Water and Power

Key Issues for 2019 IRP

- SB 350 and SB 100 compliance
- Planning study of 2019-2038
- GHG emission reduction goals/alternatives
- RPS goals/alternatives
- Deferred to 2024 IRP
 - Impact of transportation electrification
 - Future of the Intermountain Power Project (IPP) renewal
 - Potential cost-effective energy storage, demand response, energy efficiency, etc.



2024 IRP CHANGES

Burbank Water and Power

Major Updates

- Load/peak update
- Transportation electrification plan
- Demand response
- Time of use (TOU) rates
- Update to regulations



Major Changes

- Dedicated Project Manager
- Start early
- Robust stakeholder process/community outreach
- Transmission study/options



Major Changes

- Impact of the IPP renewal
- Set a clear timeline
- Transportation electrification plan
- Attainable/practical results/recommendations



Major Changes: Project Manager

- Role of Project Manager
 - Manage consultant, assist with IRP report, ensure compliance, stakeholder engagement lead, etc.
 - Consultant will run models and write the report
- 2024 Project Manager will be a 2 person team:
 - Assistant General Manager, Power Supply
 - Power Resources Manager



Major Changes: Robust Stakeholder Process

- Development of the Stakeholder Technical Advisory Group (STAG) to help identify issues/concerns/solicit feedback on the IRP
 - Hold at least 4-6 STAG meetings
- More robust IRP survey
- Development of an IRP website, for up-to-date information on meetings, modeling results, etc.
- Hold at least 2 community meetings
- Regular updates to Board and City Council



Major Changes: Transmission Constraints

- Burbank is a member of the Los Angeles Balancing Authority.
- Burbank only secures resources where it has transmission rights.
- Transmission rights are limited.



CA Transmission Systems



Major Changes: Intermountain Power Project (IPP) & Hydrogen

Item	Details of Coal Plant	Details on Renewal Project
Resource Type	Coal	Natural gas & green hydrogen
Location	Delta, Utah	Delta, Utah
Megawatt (MW) Capacity of generation	1800 MW	840 MW
Commercial Operation Date	June 1986 (Unit 1) and May 1987 (Unit 2)	June 2025-2045 (for natural gas) Post 2045, SB 100* compliant
Termination date	June 15, 2027	2077



Major Changes: IPP & Hydrogen

Item	Existing Contract (1987 – 2027)	Renewal Contract (2027 – 2077)
Southern Transmission System (STS) Capacity	2400 MW	2400 MW
BWP % Share of Generation	4.17%	3.33%
BWP % Share of STS	4.49%	4.2%
BWP Generation Share (MW)	89.28 MW coal (until June 2025), 35.028 MW natural gas (July 2025 to June 2027)	28 MW, starting June 16, 2027 (after the termination of the original Power Sales Contract for IPP coal)
BWP STS Share (MW)	107.95 MW	101.4 MW



IRP Timeline

STAG Meeting #1
(December 15, 2022)

- IRP 101
- Role of STAG Group

STAG Meeting #2
(January 15, 2022)

- Regulations 101
- Power Supply 101

Board Update
(January/February/March/April
2023)

STAG Meeting #3
(February 23, 2023)

- IPP 101
- RPS 101
- Gas and energy price update

Stakeholder Meeting #4
(March 23, 2023)

- Black and Veatch Role
- Power supply update

Community Meeting #1
(April 20, 2023)

- IRP 101 and Power resources 101
- Public comment

Stakeholder Meeting #5/6/7/8
(April-July 2023)

- Discuss assumptions
- Discuss scenarios
- Discuss final results

Community Meeting #2/3
(Summer 2023)

- Discuss scenarios
- Discuss final results

Board/City Council
(Fall 2023)

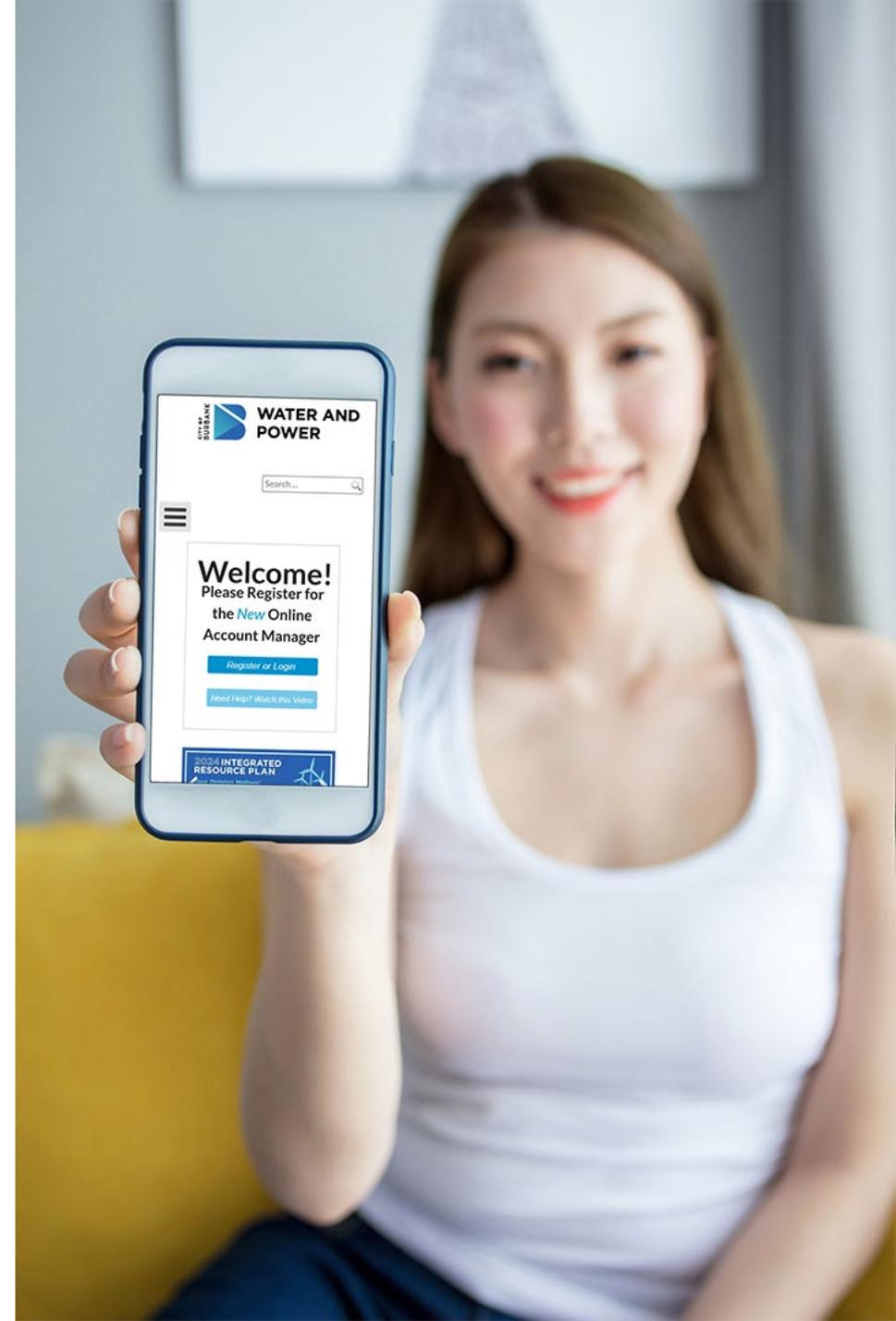
- Provide periodic updates
- Discuss final results
- Request approval for the final IRP

TOOLS AND TECHNOLOGY

IRP Stakeholder Engagement

Tools and Technology

- Internal “cloud” site for the STAG and Staff to access files anytime
- Continuously update the BWP IRP website
- IRP survey for the public
- Marketing efforts for meetings, feedback and survey



BWP IRP Website

- Develop an easily accessible website
 - <https://www.burbankwaterandpower.com/2024-irp>
 - All public meeting documents will be posted
 - Final IRP will be posted
 - Timeline/schedules will be posted
 - Feedback form



2024 IRP - Survey

- Survey posted on the BWP IRP website (over 500 responses so far)
- Community Outreach
 - Newsletters
 - Social media (Facebook, Twitter, etc.)
 - Newspaper ads
 - Bill inserts



Thank you for your time

Mandip Samra

Assistant General Manager

Power Supply Division

Burbank Water and Power

msamra@burbankca.gov

818-967-1997