

Power Purchase Agreement and Planned Capacity Survey

Background

APPA is requesting your participation in a survey to help assess current generation by capturing what utilities and joint action agencies (JAAs) purchase through purchase power agreements (PPAs) and the future capacity additions they have planned. The survey will also gather information on the extent that public power utilities and JAAs are or plan to use refundable tax credits and/or federal government and state funding and the extent to which public power utilities are expanding their energy mix with clean energy. The results will help inform APPA on how best to advocate for advancing the needs of public power utilities and better assess how we can help connect you with resources and funding opportunities.

APPA is conducting this survey to collect information on members' generation profile, given much of the renewable generation is contracted for instead of directly owned by the utility.

Survey respondents will receive a complimentary copy of the aggregated results. Please consult with others in your organization to ensure that only one person provides answers to the survey.

The survey can be previewed and downloaded [here](#).

Please submit your responses to the survey by September 28, 2023.

Please direct questions to Lindsey Buttel at LButtel@PublicPower.org.

Contact Information

1) Which of the following best describes your organization?*

- Public power utility
- Joint action agency with generation
- Joint action agency without generation
- Other (please specify): _____

2) Utility or Joint Action Agency Name*

3) City*

4) Where is your utility located?*

- Alabama
- Alaska

- American Samoa
- Arizona
- Arkansas
- California
- Colorado
- Connecticut
- Delaware
- Federated States of Micronesia
- Florida
- Georgia
- Guam
- Hawaii
- Idaho
- Illinois
- Indiana
- Iowa
- Kansas
- Kentucky
- Louisiana
- Maine
- Marshall Islands
- Maryland
- Massachusetts
- Michigan
- Minnesota
- Mississippi
- Missouri
- Montana
- Nebraska
- Nevada
- New Hampshire
- New Jersey
- New Mexico
- New York
- North Carolina

- North Dakota
- Northern Mariana Islands
- Ohio
- Oklahoma
- Oregon
- Palau
- Pennsylvania
- Puerto Rico
- Rhode Island
- South Carolina
- South Dakota
- Tennessee
- Texas
- Utah
- Vermont
- Virgin Islands
- Virginia
- Washington
- Washington, D.C.
- West Virginia
- Wisconsin
- Wyoming

5) First Name*

6) Last Name*

7) Phone Number

Please use format XXX-XXX-XXXX*

8) Email Address

Please use email associated with APPA website login credentials (if applicable)*

Current Capacity

9) How much capacity, currently in operation, does your utility or JAA currently own for the following generation resources? Please answer in megawatts (MW). If your utility or JAA does not own any capacity for one or more of the resources below, please leave blank.

Solar (including community solar):

Wind: _____

Hydropower: _____

Natural gas: _____

Coal: _____

Nuclear: _____

Hydrogen: _____

Other renewable - please enter MWs and specify resource:

Other non-renewable - please enter MWs and specify resource:

10) How much total energy storage does your utility or JAA currently own? If your utility or JAA does not own any energy storage, please leave blank.

Capacity (in MW): _____

Energy (in MWh): _____

Duration (in hours): _____

Type of energy storage:

- Battery
- Chilled water thermal
- Compressed air
- Electric thermal
- Flywheel
- Ice thermal
- Lead-acid battery
- Lithium-ion battery
- Lithium-iron-phosphate battery
- Pumped hydrogen
- Thermal
- Underground pump

Vanadium redox flow

Zinc flow battery

Other - please specify: _____

IF UTILITY OR JAA OWNS ENERGY STORAGE

11) Is the energy storage in combination with another energy source? If yes, which fuel type?

Yes (please specify the fuel type):

No

12) How much capacity, currently in operation, does your utility or JAA have in existing PPAs for the following generation resources? Please answer in megawatts (MW).

Solar (including community solar):

Wind: _____

Hydropower: _____

Natural gas: _____

Coal: _____

Nuclear: _____

Hydrogen: _____

Other renewable - please enter MWs and specify resource:

Other non-renewable - please enter MWs and specify resource:

13) How much total energy storage has your utility or JAA contracted for under an existing PPA?

Capacity (in MW): _____

Energy (in MWh): _____

Duration (in hours): _____

Type of energy storage:

Battery

Chilled water thermal

Compressed air

Electric thermal

Flywheel

- Ice thermal
- Lead-acid battery
- Lithium-ion battery
- Lithium-iron-phosphate battery
- Pumped hydrogen
- Thermal
- Underground pump
- Vanadium redox flow
- Zinc flow battery
- Other - please specify: _____

IF UTILITY OR JAA OWNS ENERGY STORAGE

14) Is the energy storage in combination with another energy source? If yes, which fuel type?

- Yes - please specify resource: _____
- No

ASKED OF JAAS ONLY

15) Do you know how much capacity your members have contracted to purchase (with non-public power sources) of the following generation resources?

Solar (including community solar):

Wind: _____

Hydropower: _____

Natural gas: _____

Coal: _____

Nuclear: _____

Hydrogen: _____

Other renewable - please enter MWs and specify resource:

Other non-renewable - please enter MWs and specify resource:

Future Capacity

16) How much capacity is your utility or JAA currently developing, which is not yet operational, in the next 5 years (either through direct ownership or by contract) of the following generation resources? Please answer in megawatts (MW).

Solar (including community solar):

Wind: _____

Hydropower: _____

Natural gas: _____

Nuclear: _____

Hydrogen: _____

Other renewable - please enter MWs and specify resource:

Other non-renewable (such as RICE units) - please enter MWs and specify resource:

Q17 THROUGH Q24 ARE ONLY ASKED IF YOU ARE CURRENTLY DEVELOPING AN ADDITIONAL RESOURCE. THIS SET OF QUESTIONS IS ASKED FOR EACH ADDITIONAL RESOURCE.

17) You indicated that you plan to develop more solar capacity within the next 5 years. How does your utility or JAA plan to develop solar capacity in the next 5 years? Please check all the options that apply.

Power purchase agreement

Ownership - either individual or joint

ASKED IF DIRECT OWNERSHIP

18) Will you make use of any of the following? Please select all that apply.

Elective payment of energy tax credits

Federal grant or loan (please specify the grant or loan):

Other governmental support (please specify):

None of the above

19) What is the potential completion date for your utility or JAA's planned solar capacity? Please answer in (MM/YY) or write unknown if you do not have a completion date.

20) Please provide a description of the solar project.

21) Do you have a federal permit for the project?

() Yes - please describe the permit:

() In progress

() No

IF Q22=YES

22) How long has it taken you to obtain a federal permit? Please provide the number of months.

IF Q22=IN PROGRESS

23) How long have you spent working towards obtaining a federal permit? Please provide the number of months.

24) Will the project be co-located with an existing fossil-fired electric utility steam generating unit (EGU)?

() Yes

() No

New Energy Storage in Development

25) How much total energy storage is your utility or JAA currently developing, which is not yet operational, in the next 5 years (either through direct ownership or by contract)?

Capacity (in MW): _____

Energy (in MWh): _____

Duration (in hours): _____

Type of energy storage:

[] Battery

- Chilled water thermal
- Compressed air
- Electric thermal
- Flywheel
- Ice thermal
- Lead-acid battery
- Lithium-ion battery
- Lithium-iron-phosphate battery
- Pumped hydrogen
- Thermal
- Underground pump
- Vanadium redox flow
- Zinc flow battery
- Other - please specify: _____

Elective Payment of Energy Tax Credits and Infrastructure Investment and Jobs Act (IIJA) Funding Opportunities

26) In addition to any projects under development discussed in questions you just answered, is your utility or JAA considering using elective payment of energy tax credits within the next 5 years? If yes, please describe.

- Yes - please describe: _____
- No
- Not sure

27) To what extent has the opportunity of elective payment of energy tax credits influenced your utility or JAA's likelihood for direct ownership of energy assets as opposed to pursuing PPAs?

- Very likely
- Somewhat likely
- A little likely
- Not likely at all
- Not sure

IF A LITTLE LIKELY, NOT LIKELY AT ALL, OR NOT SURE

28) What is the largest barrier that is preventing your utility or JAA from using elective payment of energy tax credits?

29) In 2022, the federal government passed the Inflation Reduction Act (IRA) and, in 2021, the Infrastructure Investment and Jobs Act (IIJA) that provides \$1.2 trillion in funding, including grants that public power utilities can apply for. Below are several categories of IIJA and IRA funding opportunities that public power agencies can apply for. Please select the categories your utility or JAA is interested in applying for.

- Broadband
- Cybersecurity
- Energy efficiency
- Energy research, development, and deployment
- Hydropower incentives
- Rural energy loans and grants
- Smart grids
- Transmission
- Electric or hydrogen transportation
- Carbon capture storage
- Hydrogen
- Other (Please specify): _____
- None of the above

30) Has your utility or JAA applied for a federal IIJA or IRA funding, such as a grant, loan, or rebate, within the past year?

- Yes
- No
- Not sure

31) How likely is your utility or JAA to apply for IIJA or IRA funding, such as a grant, loan, or rebate, in the future?

- Very likely
- Somewhat likely
- A little likely
- Not likely at all
- Not sure

IF A LITTLE LIKELY, NOT LIKELY AT ALL, OR NOT SURE

32) What is the largest barrier that is preventing your utility or JAA from applying for IIJA or IRA funding?

33) Are you aware of APPA's federal funding resources, including APPA's dedicated [website](#) and email listserv?

Yes

No

34) What could APPA do to improve its resources on federal funding opportunities, including the IIJA and IRA funding opportunities?

Carbon Emission Reduction Goals

35) Does your utility or JAA have a clean energy/carbon dioxide emission reduction goals?

Yes

No

IF YES

36) Please describe your utility or JAA's clean energy and carbon dioxide emission reduction goal(s). There are textboxes below to enter up to three goals. If you have fewer than three, please leave the additional rows blank.

Each goal will ask for

(1) the year your utility or JAA hopes to accomplish the goal

(2) the percentage of the goal you hope to accomplish (i.e. 50% renewable energy mix, 25% reduction in emissions)

(3) the type of goal (carbon neutral, renewable, carbon free, zero net carbon, emission reduction, and clean energy); and

(4) a description of what is included in your goal

Goal 1:

Year goal will be accomplished by::

Goal percentage:: _____

Goal type:

Carbon neutral

Renewable

Carbon free

Zero net carbon

- Emissions reduction
- Clean energy

Description of what is included:

Goal 2:

Year goal will be accomplished by::

Goal percentage:: _____

Goal type:

- Carbon neutral
- Renewable
- Carbon free
- Zero net carbon
- Emissions reduction
- Clean energy

Description of what is included:

Goal 3:

Year goal will be accomplished by::

Goal percentage:: _____

Goal type:

- Carbon neutral
- Renewable
- Carbon free
- Zero net carbon
- Emissions reduction
- Clean energy

Description of what is included:

Data Sharing and Additional Feedback

IF UTILITY

37) APPA will only share individual utility information with the respective state/regional association to which the utility is a member; otherwise, the data will not be shared outside of APPA staff.

[] Please check here if you do not want APPA to share your data with your state/regional association.

38) Is there anything else you would like to share or any feedback you have about this survey?

39) Are you ready to submit your response? *

() Yes

() No

Thank You!