



Investments in Energy Highways are Key to Our Energy Future

Demand for energy continues to grow in Idaho Power's service area as people and businesses move here at one of the fastest rates in the nation. We have a responsibility to meet our customers' energy needs, and transmission lines are the key to doing that.

High-voltage transmission lines are like the interstate highways of energy. They move energy efficiently over long distances, and they are a central piece of our long-term plan to ensure you have as much energy as you need when you need it. That's why we're working on projects like Boardman to Hemingway (B2H) and Gateway West.

B2H and Gateway West are high-voltage transmission lines that will make the grid more resilient and reliable while allowing us to import power from outside our area. B2H will give us access to affordable surplus energy, much of it from clean hydropower, in the Pacific Northwest. We'll use it to import enough power for more than 150,000 average homes during summer's peak demand — a big boost to help keep our customers' air conditioners and irrigation pumps running. We hope to break ground on B2H in late 2024 or early 2025 and complete the line in 2027. Visit idahopower.com/b2h for more information.

Gateway West will stretch from central Wyoming to southwestern Idaho. This

project will help Idaho Power deliver energy to our customers in southern Idaho and eastern Oregon. We expect the sections of Gateway West that we own to start coming online as soon as 2029. For more information, visit idahopower.com/gww.

Besides helping Idaho Power keep up with growing demand, Gateway West and B2H will bolster the broader grid. For example, utilities in the Pacific Northwest will use B2H to import energy during the winter, when their customers' energy use peaks, from the Mountain West and desert Southwest. These high-voltage transmission lines also improve reliability by giving utilities more paths to route electricity from where it's generated to their customers.

B2H and Gateway West are just two of the transmission line projects Idaho Power is working on. The company expects to invest almost \$2 billion in new transmission projects over the next five years, including approximately \$550 million on B2H.

We are not just building new infrastructure; we're also taking care to maintain and repair our existing grid to make it as safe and resilient as possible. Across our service area, we're inspecting lines to ensure they're in good working condition

and upgrading them as needed. And we periodically rebuild existing lines because growth has increased energy demand or to protect them from wildfire.

"Investing in our infrastructure is an investment in all our energy futures and our continued commitment to powering our communities with safe, reliable, affordable energy."





Batteries Bolster the Grid and Support Hydropower

Idaho Power's largest energy source is hydroelectric power generated on the Snake River. Even though we've been using water to make electricity since the company was founded in 1916, we're always looking at ways to use that resource more effectively.

Battery Energy Storage Systems (BESS) are the latest technology we are deploying to enable more efficient use of our hydropower resource, helping to make sure that reliable, affordable energy is available when our customers need it. By using these systems to store energy when it's plentiful, we can optimize the use of water in our reservoirs.

Electricity is so integral to our lives, we rarely think about all the ways we rely on it. Until recently, one big drawback is that significant amounts of electricity could not be stored. The amount of energy generated had to precisely match the amount being used every instant.

While that's still mostly true, advances in utility-scale BESS allow us to store some energy for later use. That flexibility helps to keep the energy grid stable and use our other resources more efficiently.

Many people think of batteries as a good way to store extra energy from solar or wind power projects, and they are. For example, when solar panels are churning out electricity at noon, they can charge batteries that deliver energy in the evening when we're still running our air conditioners as the sun is going down.

Batteries help in other ways, too. Most of Idaho Power's 17 hydropower projects are "run-of-river," meaning they store little or no water behind a dam. They only generate electricity with whatever water flows downstream.

That streamflow depends on a lot of things, like the amount of runoff from winter snow, the amount being diverted upstream to water crops, or how much

is entering the river from springs fed by the Eastern Snake Plain Aquifer.

So the amount of hydropower we can generate varies from year to year. Having batteries to bolster that hydropower can reduce the amount of energy we have to buy on the market during periods of high demand. Batteries also help us use our reservoirs more efficiently, enabling us to store water to use later in the day, overnight, or later in the season when it provides the most benefit to our customers.

A BESS can't store energy indefinitely. We usually charge and discharge them within the same 24-hour period. For example, if a 100-megawatt (MW)/400-megawatt-hour (MWh) battery array is fully charged during peak solar hours in the middle of the day, that energy likely will be sent back to the grid the same evening over a 4–6 hour span.

Hydropower, on the other hand, can be stored for longer in places like Brownlee and Hells Canyon reservoirs, provided there is room to let the reservoir collect water from upstream. It can be sent through the turbines at a faster or slower rate depending on what our customers need.

Idaho Power currently has about 200 MW/800 MWh of BESS capacity on our system, with at least 300 MW/1,200 MWh of additional storage set to come online in the next couple of years.

From the Electric Kitchen Peach Pancakes

- 1 cup flour
- ½ tsp baking soda
- 1 egg, beaten
- ½ cup 1% milk
- 1 Tbsp sugar
- 1 tsp baking powder
- ¼ tsp cinnamon
- ¾ cup peach yogurt
- 2 Tbsp canola oil
- ½ cup chopped peaches, drained

Combine flour, baking powder, soda, and cinnamon in a medium bowl; make a well in center of mixture. Combine egg, yogurt, milk, oil, and sugar; add mixture to dry ingredients, stirring just until moistened. Fold in peaches. Preheat nonstick griddle to 325°. For each pancake, pour ¼ cup batter onto a hot griddle. Cook until light brown on bottom; turn and cook other side. Makes 4 servings, 2 pancakes each.

Recipe selected from Idaho Power's Centennial Celebration Cookbook.

September 2024 Breakfast



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Did You Know?

Hydropower is our largest energy resource and helps keep your prices 20-30% below the national average.

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