



# Project Fact Sheet

Artist rendering of proposed plant.

## Langley Gulch Power Plant and Transmission Connection

### About the Plant

Idaho Power is building the clean, quiet, highly efficient Langley Gulch Power Plant on 137 acres of undeveloped range land located in rural Payette County, adjacent to Interstate 84 and immediately southwest of Exit 9. The power plant will be a combined-cycle combustion turbine (CCCT), which means it will have two turbines to generate electricity—one using natural gas and the other steam. The exhaust heat from the combustion of natural gas is used to make steam, which drives the steam turbine.

This flexible resource will have the features of a baseload plant, in that it is economical and will run a great deal of the time. It also has the flexibility to vary output quickly to integrate intermittent resources from area wind and future solar projects.

The new power plant was identified as a need in Idaho Power's 2004 and 2006 Integrated Resource Plans (IRP), and as a committed resource in the 2009 IRP. The project is supported by the Idaho Public Utilities Commission (IPUC), and is being added to our diversified portfolio of resources which also includes energy efficiency measures and alternative energy resources such as wind, solar, geothermal and biomass.

Our system capacity is still catching up with the significant load growth experienced in Idaho Power's service area over the past 10 years. Constrained transmission capacity increases the need for and urgency of this resource within our service area.

Even with considerable conservation and energy efficiency efforts, Langley Gulch generation is needed by 2012. Idaho Power is committed to ensuring its customers have the electricity they need today on-demand and that future generations enjoy the same lifestyles we enjoy today. Our ability to do so requires the addition of this generation capacity.

### Quick Facts

- **A 300-MW Power Plant:** with combined-cycle combustion turbines to generate electricity—one using natural gas and the other steam
- **Alternative Resources:** capable of integrating intermittent, alternative resources such as wind and solar from area projects
- **Location:** remote private property consisting of dry-land range south of Interstate 84 at exit 9 in Payette County
- **Air Quality:** emission control technology for clean, safe and efficient operation, meeting all federal, state and local requirements
- **Sight and Sound:** exhaust stack is 160 feet—lower than most cellular towers—and turbines are enclosed to control and reduce external noise
- **Construction Begins:** power plant July 2010, 230-kV line Sept. 2010 and 138-kV line Sept. 2011
- **Completion:** July 2012



## Langley Gulch Site Selection

The Langley Gulch site was selected by an Idaho Power project team that performed a thorough evaluation of 13 potential sites from Ontario, Oregon to Hammett, Idaho. Attributes considered included: transmission and gas line access, rail and site access, environmental considerations, geotechnical and land characteristics, zoning, air quality, water availability and benefits to neighboring communities. The site in Payette County provides the best combination of these attributes, including performance, reliability, constructability and economic factors.

## Supporting the Payette County Economy

The Langley Gulch Power Plant will create both short- and long-term job opportunities. The construction requires a labor force of approximately 120 workers for as long as two years, including qualified local electricians, pipefitters, steelworkers, excavators, carpenters, concrete workers, and laborers. Once the power plant is complete, it will employ 18 personnel and will be placed permanently in the tax base, with Idaho Power paying property taxes.

The addition of this generation facility will help many communities in our service area and across the region prosper through new jobs, local procurement of supplies and additional tax dollars, as well as the electricity now available to provide service now and into the future.

## Construction Costs

The Langley Gulch Power Plant will be built for approximately \$427 million, including expected transmission costs to connect the facility to the grid. For this capital expenditure, we intend to pursue a combination of financing options and equity.

## Transmission Connection

Two new transmission lines will be built to connect the Langley Gulch power plant to the existing 230 kilovolt (kV) Ontario-Caldwell and 138-kV Caldwell-Willis transmission lines. The primary proposed line will cross 2.5 miles on Bureau of Land Management (BLM) property and consist of two 230-kV circuits.

The additional proposed line is approximately 18-miles, located on BLM property, private property and within the road right-of-way. The right-of-way will be 100 to 150 feet wide depending on the location. The line will be energized at 138-kV but will be built to 230-kV standards to accommodate future capacity needs.

The primary, 2.5-mile line will use 110- to 120-foot single steel poles, double circuit (three lines on each side). The structures will span approximately 750 to 900 feet. Construction is planned for September 2010 to February 2011.

The additional 18-mile proposed line will use both H-frame and single-pole construction. Construction for this line is planned for September 2011 to May 2012.

Specific structures, dimensions and spacing may vary depending on the final line route.



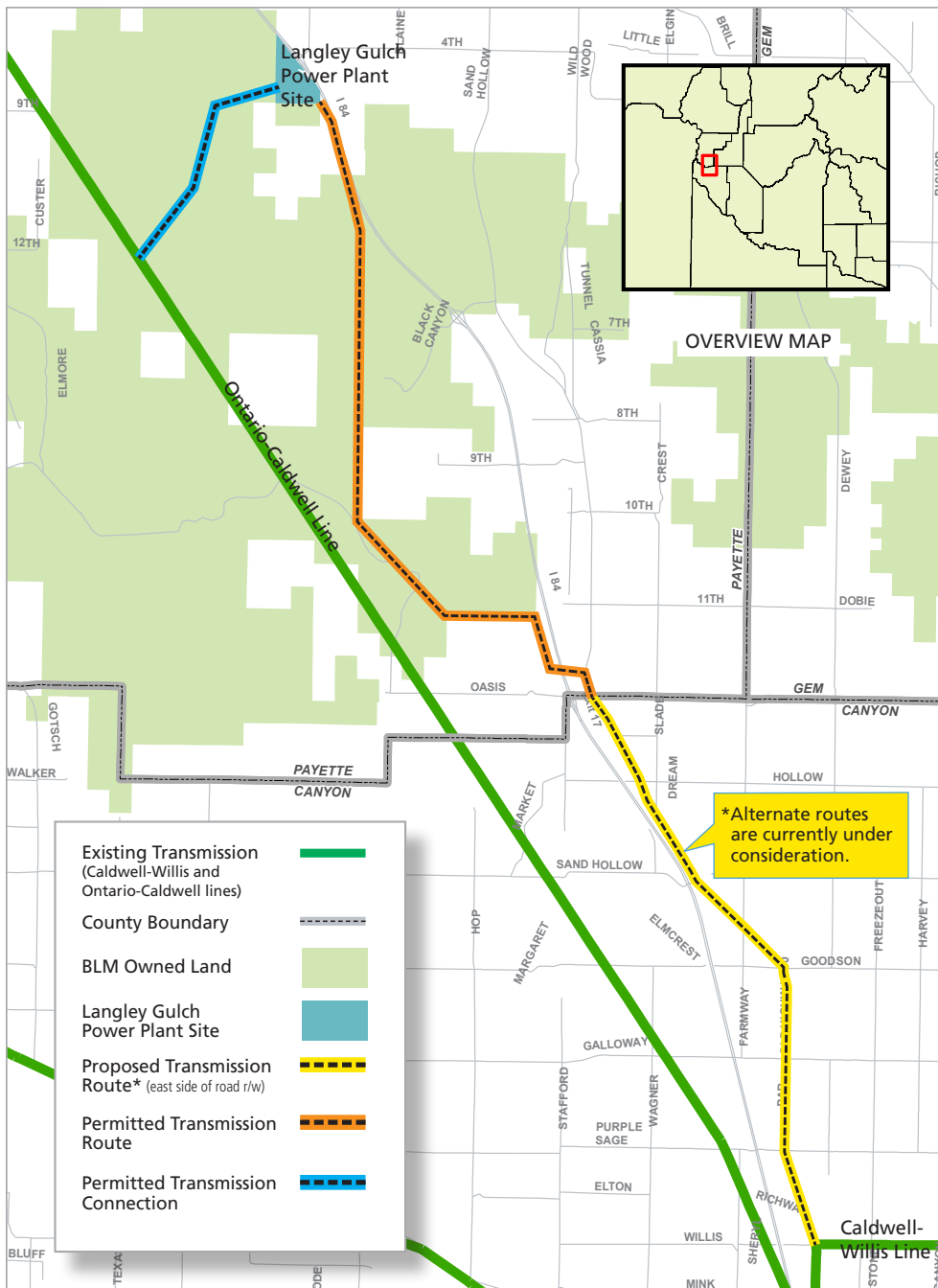
## Minimizing Impact

This power plant will be built to have a minimal impact on air quality as it is required to meet the National Ambient Air Quality Standards set by the Environmental Protection Agency. The power plant will have the best available control technology (BACT) for air emission controls.

As a comparison, the air emissions from the power plant are the same type of emissions that come from a typical home or business gas furnace. On a per unit basis, this power plant will be cleaner with the following equipment installations: low ni-

trogen oxide burners, selective catalytic reduction system and a catalyst to reduce carbon monoxide. Through the air permitting process, detailed air quality studies will be completed that analyze the impacts this power plant may have on air quality. Based on the location of the power plant, emissions technology and preliminary models, the impacts will be minimal.

A combined cycle power plant emits about half the carbon emission of a coal-fired power plant per megawatt of energy produced.



## Contact Information

Idaho Power appreciates your interest in and support of this project. Please contact us with your comments, concerns or feedback.

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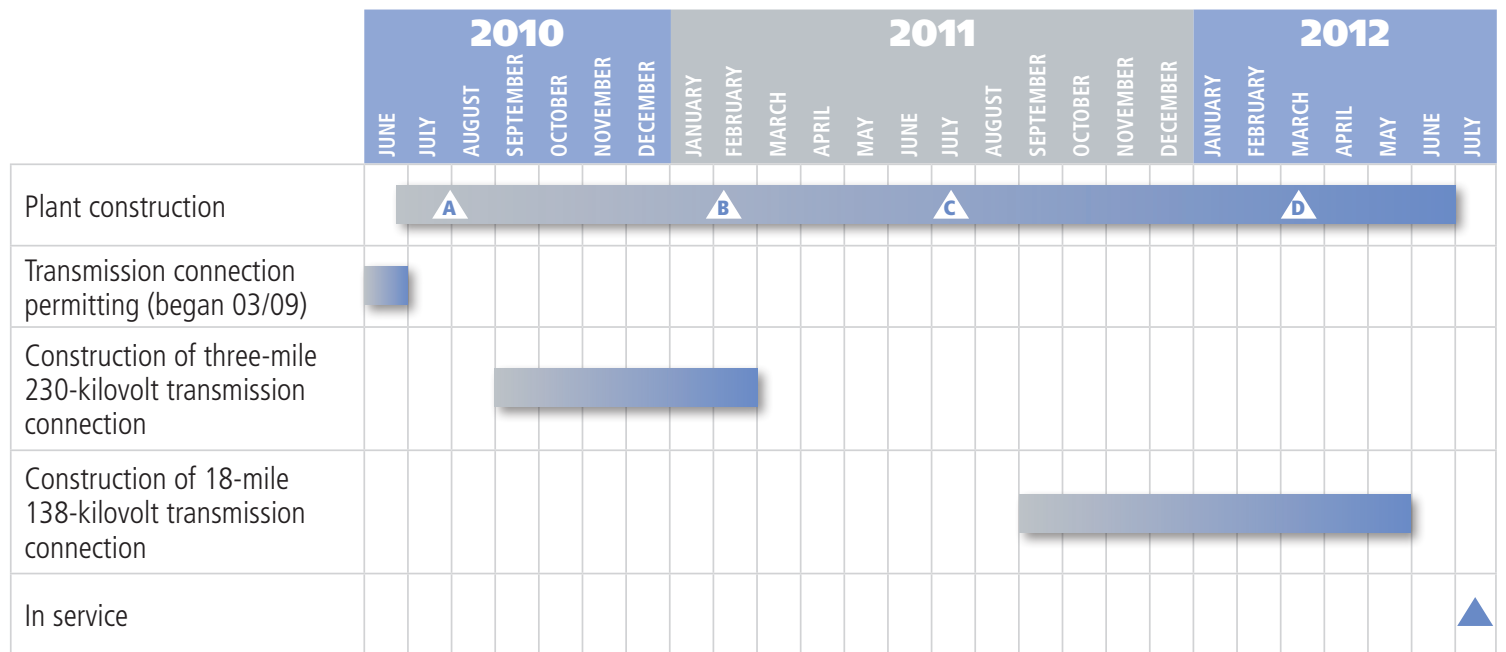
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Learn more about the Langley Gulch project at [www.idahopower.com/langleygulch](http://www.idahopower.com/langleygulch), and Idaho Power's ongoing efforts to ensure reliable, fair-priced electricity for future generations at: [www.idahopower.com/ourfuture](http://www.idahopower.com/ourfuture).

## Project Timeline and Next Steps

The Langley Gulch Power Plant project is on schedule. Limited construction activities begin in late June/July 2010, with full construction activities to start no later than August 1, 2010 and with receipt of an air permit to construct.

These are some other major milestones:



**A** Receipt of an air permit    **B** Gas turbine delivery    **C** Steam turbine delivery    **D** Start of commissioning activities

Other current project activities include:

- Engineering design for the water pipeline from the Snake River to the project site
- Selection of an engineering firm and contractor for the gas pipeline construction

The permitting process is also moving forward on schedule.

Permits secured or in process include:

- Air Emissions—permit to construct
- Payette County—comprehensive plan change, three conditional use permits, a rezone and a development agreement. Finalized March 15.
- Canyon County—proposed line routes for the 230-kilovolt (kV) transmission connection to the existing Caldwell – Willis line.
- Water—site groundwater rights have been secured, in the process of securing surface water rights from the Snake River.
- National Environmental Policy Act (NEPA)—BLM right-of-way use for transmission and water lines

Idaho Power will continue the permitting process over the next three to six months.