

## Energy Gateway Transmission Project

# Frequently asked questions

These are some frequently asked questions regarding the Energy Gateway Transmission Expansion Project.

## General

### What is this project?

- Energy Gateway is a major transmission expansion program announced by PacifiCorp in May 2007. It will add approximately 2,000 miles of new transmission lines across the West.
- The Energy Gateway Transmission Expansion Project is the first transmission investment of this scale in the region in almost two decades.
- PacifiCorp plans to invest more than \$6 billion during the course of construction on these new lines.
- Energy Gateway connects PacifiCorp's east and west control areas, and provides the flexibility to access new and existing resources from where they are – or will be – available, to where they are needed to serve customers.
- Unlike the conventional “generation before transmission” approach, this transmission project is a relatively new approach, constructing transmission ahead of specific generation resources. With increasing development of location-constrained renewable resources, one project often can no longer form an anchor for transmission.

### What's the current status of Energy Gateway?

- Construction began in February 2009 on the first segment of this project, the Populus to Terminal segment in Idaho and Utah, with completion scheduled for late 2010.
- Outreach, siting and permitting work continues on other segments. PacifiCorp has committed tens of millions to date on permitting, design and siting alone.
- PacifiCorp's priority is building to meet the needs of our customers and responsible cost

management. PacifiCorp will prioritize timing of major segments to most prudently bring these projects on-line.

- Our commitment from the beginning was to build capacity to maximize benefits for our customers, and to build for greater regional benefit, if possible. That intent remains, but we are moving forward appropriately to ensure the lines are in place to serve our customers.

### Why is this investment needed?

- Numerous studies indicate that the existing transmission grid across the West is becoming increasingly constrained. Customer growth is driving the need to add transmission lines. Our customers need a stronger and more versatile grid to help alleviate congestion, provide resource flexibility, deliver renewable energy and ensure delivery of electricity to customers at a reasonable overall cost.
- Taken as a whole, the project is critical to shaping and strengthening the West's transmission system, enhancing domestic energy security and ensuring safe, reliable, efficient and coordinated energy service.

### Why would PacifiCorp want to commit to that kind of investment? What's in it for the company?

- First and foremost, PacifiCorp has a regulatory obligation to serve its customers. That includes making the investments needed to provide reliable service to existing customers and to make improvements as needed to serve growing energy needs within our communities.
- It is an almost unprecedented investment in scope and scale, but as an industry leader, PacifiCorp must take steps to ensure its system is adequate



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and capable of meeting future customer load growth and regional needs.

- This is a comprehensive approach, instead of trying to take it on as incremental, short-term, smaller projects to meet our regulatory obligations. This approach, while bringing many additional complexities from sheer scale, is the best long-term solution for our customers.
- PacifiCorp, with its large service area, access to renewable energy resources and the backing of MidAmerican Energy Holdings Company, is uniquely situated to make these essential investments in the regional transmission grid. The project will also provide substantial long-term benefits to the western region by promoting cost-efficient, flexible and diverse resource development.
- As in any investment made by a business, PacifiCorp will seek recovery of those costs associated with meeting our customers' energy needs and the ability to earn a return on that investment.

#### **There have been many large transmission projects announced over the years. Why should we think this one actually will be built?**

- It is being built. One key segment – Populus to Terminal – is already well under construction. Other segments are making steady progress through siting and permitting processes.
- PacifiCorp is uniquely positioned to make these essential investments, follow through and complete construction. The company already owns and operates one of the largest transmission systems in the West – some 15,800 miles of transmission lines. The company serves retail customers spread throughout six Western states, providing both expertise in delivering energy where it is needed and first-hand recognition of constraints on the existing system.
- PacifiCorp's service area also aligns with many of the best and most efficient resource areas in the West, including areas with strong renewable resource potential.
- PacifiCorp has the backing of MidAmerican Energy Holdings Company, which has shown itself to be a long-term investor in capital intensive energy businesses. The business strategy of MidAmerican allows for a longer term business investment focus.

- Also, because of MidAmerican's association with Berkshire Hathaway, PacifiCorp can benefit from access to capital and reduced long-term debt financing costs.

#### **Whose project is it?**

- PacifiCorp, owned by MidAmerican Energy Holdings Company, is the owner of and investor in the Energy Gateway transmission project.
- Because PacifiCorp serves its retail customers as Rocky Mountain Power in Utah, Wyoming and Idaho, and as Pacific Power in Oregon, Washington and California, those names will be the ones used most regularly during local permitting and construction activities. That's how our customers and communities know us, and it is the local face of the company that is making the investment.

#### **Is this all to serve PacifiCorp's customers or will it be used to sell power in the wholesale market?**

- The primary use of the transmission lines is to serve PacifiCorp customers' increasing energy usage over time. PacifiCorp has a proven business need to build two 1,500 megawatt capacity "pipes" of new transmission from Wyoming for its customers, and is moving forward to accomplish that.
- If excess capacity is available, it will be marketed and, depending on who purchases the energy, it could be used for power sales outside of PacifiCorp's service area. However, PacifiCorp anticipates crediting the revenue associated with that capacity back to PacifiCorp's retail customers to help offset the cost of this new infrastructure.
- PacifiCorp has a long history of providing access to its transmission system by other entities and was the first to provide open access, as one of the conditions of the 1989 merger between PacifiCorp and Utah Power (now Rocky Mountain Power).

#### **If people can conserve energy, would there still be a need for this project?**

- Yes. However, efficient use of energy and demand-side measures to reduce usage will continue to be very important priorities throughout the region. Energy efficiency measures are part of the company's overall resource mix and are factored into our need to build new transmission. They

reduce energy consumption and help minimize impacts on the environment that can come from most aspects of energy generation, but won't entirely eliminate the need for new transmission.

- Even with efficiency measures, the existing transmission system is severely constrained and an investment must be made to ensure the system is flexible in its ability to move energy – including clean renewable energy – to markets adequate in size to meet growing needs and ensure system reliability, and capable of meeting future customer load growth and regional needs.

**I've heard PacifiCorp no longer has immediate plans to build coal-fueled resources in Utah or Wyoming, at least during the next 10 years or so. With that change, is there still a need for these new transmission resources?**

- Yes. Regardless of the resource type we will need new transmission. While we don't have plans to build coal-fueled resources any time soon, we have added natural gas-fueled plants and renewable resources such as wind, and will need to continue developing new resource options to meet customers' needs.
- There has not been significant investment in the region's transmission system for 20 years. The growth since that time in customer load and in new resources requires new transmission.
- Climate change legislation and increased regulation of emissions from more emission-intensive generating resources provides additional incentive to invest in transmission to increase flexibility and access to new generating resource options.
- Because Energy Gateway was designed specifically to deliver energy to customers from resource areas, or "hubs," not from specific generating plants, it can accommodate and encourage a wide range of generating options to meet economics, changing risks, and state policies and preferences.
- The need for new transmission remains as strong as ever and these changing dynamics highlight how the flexible design of Energy Gateway will serve the growing and changing needs of the region.

**Will PacifiCorp benefit from the federal economic stimulus dollars?**

- Energy Gateway is an investment decision PacifiCorp made before the stimulus package was even considered, and is an investment we will make for our customers and communities regardless. We're already constructing one segment and making steady progress on others.
- Including dollars for transmission investment in the national energy picture and federal stimulus package spotlights the position we've held for several years: new transmission infrastructure is critical not only to address growth but to enable development of new and alternative energy resources.

**What has changed since Energy Gateway was first announced?**

- PacifiCorp's ongoing business analysis confirms the need to move forward with Energy Gateway, and we are.
- PacifiCorp's priority continues to be to build to meet the needs of our customers, and to manage costs responsibly to minimize the financial impacts on them. PacifiCorp will prioritize timing of major segments to most prudently bring these projects on-line.
- Through the company's recent Integrated Resource Planning process, the need for Energy Gateway was confirmed, with some flexibility added into later priority segments.
- PacifiCorp continues to explore alternatives raised through multiple public processes as part of siting specific line segments.
- PacifiCorp closely follows and coordinates on other regional transmission projects being proposed for the region, to provide the best solution for our customers and for the region. The outcome of these regional efforts may affect the ultimate configuration and timing of some of the Energy Gateway segments.

### Has the economic recession had an impact on your plans?

- There continues to be a need to develop Energy Gateway to meet the needs of our customers. That was recently verified through our long-term planning process, the Integrated Resource Plan, filed with state commissions in late May 2009 after a thorough public review process.
- Transmission development has been needed for many years, and the timeframe to get these lines in place requires several more years. Having these lines in place provides greater system stability and flexibility to serve our customers with the most cost-effective resource options now and into the future.
- Current economic conditions – with associated risks and difficulties in securing financing – may have impacted the ability of third parties to participate as equity partners or committed wholesale partners in the project. However, PacifiCorp continues to have the capability to finance the project and a proven need to build Energy Gateway to meet the needs of its retail customers.

### Will Energy Gateway be built to accommodate broader regional needs?

- PacifiCorp still believes there are viable reasons and opportunities to build Energy Gateway to serve broader local and regional transmission needs. For the past two years, the company has vigorously worked to recruit other participants in the project. To date, none have been able to make the long-term commitments necessary for participation as an equity partner or committed wholesale customer.
- We must prioritize and move forward at a level that keeps the commitments to our retail customers. Given the timing, the opportunities to partner on the project now are very limited.
- Idaho Power Company and PacifiCorp continue to work together on outreach, permitting and development of the Gateway West segments.

- Transmission customers or potential partners wanting more information should access PacifiCorp's OASIS at [www.oasis.pacificorp.com/oasis/ppw/main.htmlx](http://www.oasis.pacificorp.com/oasis/ppw/main.htmlx).

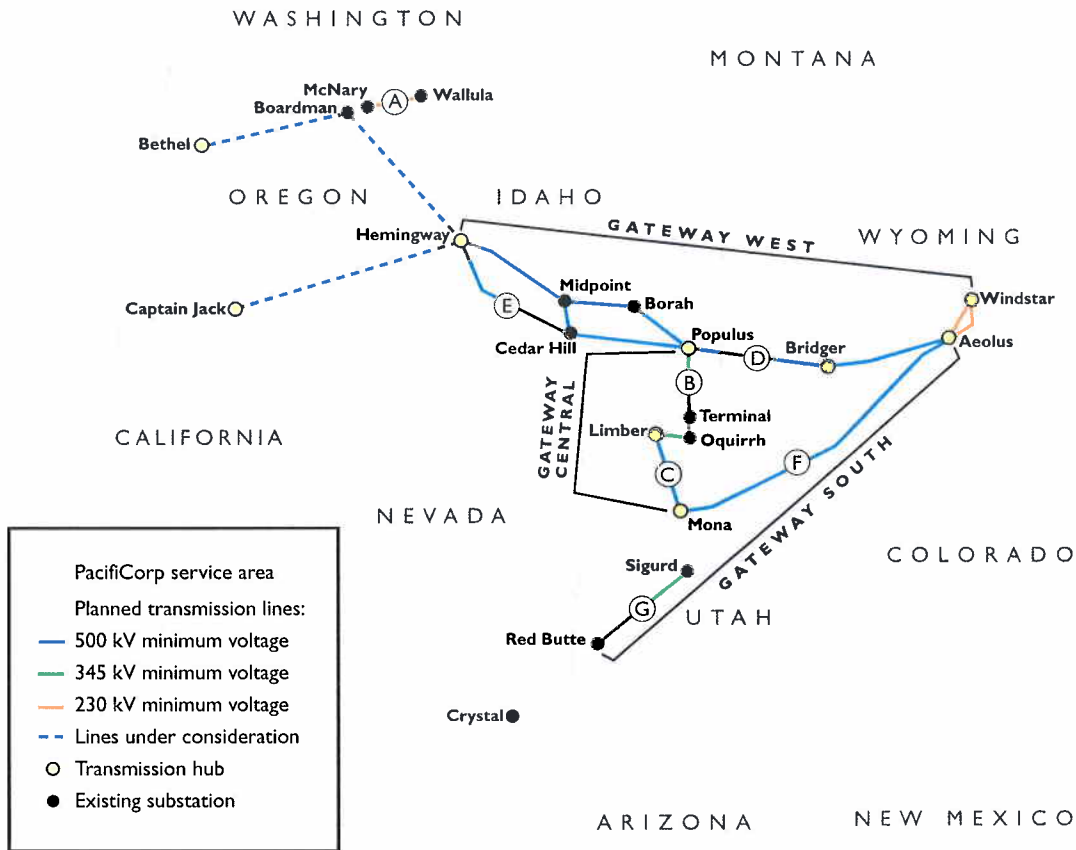
## Costs and Recovery

### How is PacifiCorp paying for Energy Gateway?

- As with other large capital investments to serve customers, the company uses a combination of cash and external financing to pay the costs of construction. The company then works with state and federal regulators to recover construction and operating costs through customer rates, spread out over the useful service life of the asset.
- Portions of Energy Gateway could still be built to be of greater regional benefit, but only if the region can commit to share the costs and risks through signed service agreements or equity participation. To date, no entity has agreed to make that commitment.
- The company will also continue to work with state regulatory commissions and the Federal Energy Regulatory Commission on incentive rate mechanisms that provide adequate protections and incentives for an investment of this size.

### What will be the rate impacts to residential, commercial and industrial customers served by PacifiCorp's Rocky Mountain Power and Pacific Power?

- Large capital investments like transmission lines become part of customer rates as they become operational.
- Also, the company's capital investments are just one factor of many in determining what rates should be. Because of this, it is difficult to be precise as to what the rate impact will be.
- Capital investment in response to customer demand for electricity does place upward pressure on rates. However, PacifiCorp has long been a low-cost provider of electricity and works to retain that position.



This map is for general reference only and reflects current plans.  
 It may not reflect the final routes, construction sequence or exact line configuration.

### Energy Gateway Transmission Expansion Project

These current in-service dates are planned, but are subject to change based on customer and regional needs.

- (A)** Walla Walla to McNary: In-service date undergoing regional review.
- (B)** Populus to Terminal: Part of the Gateway Central project. Construction underway with projected in-service date of 2010.
- (C)** Mona to Oquirrh: Also part of the Gateway Central project with projected in-service date of 2013.
- (D)** Windstar to Populus: Part of Gateway West, with projected in-service date of 2014-2016.
- (E)** Populus to Hemingway: Also part of Gateway West, with projected in-service date of 2014-2018.
- (F)** Aeolus to Mona: Part of Gateway South, with projected in-service date of 2017-2019.
- (G)** Mona to Crystal: Also part of Gateway South, with projected in-service date of 2017-2019. The adjacent Sigurd to Red Butte line has a projected in-service date of 2014.
- (H)** Hemingway to Captain Jack: In-service date undergoing regional review.

- One of the benefits of a regulated utility is its ability to gather the funds necessary to build these projects, take advantage of low financing rates, then pay for them over long periods of time. That keeps costs lower for customers in the long term.

#### **If our area isn't growing, will we still need to pay for new transmission?**

- Yes. Investments in transmission must be made on a long-term basis, and not based on short-term issues. Residential customers – everywhere – are using more electricity than they were using 20 years ago.
- PacifiCorp's transmission system is maintained and operated as an integrated system serving all customers. Energy Gateway will strengthen the connections between Rocky Mountain Power and Pacific Power service areas, providing more flexibility to move energy resources where they are needed, which helps maintain low-cost delivery and enhance service reliability.
- Transmission and power costs are an expense paid by all PacifiCorp customers, and facilities that reduce overall costs to acquire energy are a benefit to all customers. Energy Gateway is anticipated to reduce power costs in the long term over other more costly energy alternatives not utilizing new transmission capacity.
- All PacifiCorp customers will benefit from Energy Gateway, no matter where they live or work. For example, just as the costs of building a new power plant in Oregon or wind project in Wyoming are allocated among all states, the costs of constructing these lines also will be allocated accordingly. Current state and federal regulatory processes outline the means by which these costs are accounted for and PacifiCorp diligently follows these requirements.

## **Steps Involved in Construction**

#### **What is the approval process for getting these transmission lines sited and constructed?**

- Developing these transmission lines requires – and deserves -- a significant and thorough approval process, in particular because in many cases the line must be sited outside existing easements and corridors.

- Public input is critical during the line siting process, and alternatives are explored wherever possible to meet identified local needs and preferences.
- With public lands involved within most of the Energy Gateway segments, a federal agency-sponsored process is required to secure right of way grants. This is in coordination with and in addition to thorough state and local siting processes.
- Approvals include environmental impact studies required by the National Environmental Policy Act that identify and/or mitigate potential impacts of the line siting, including environmental, cultural, protected species, wetlands, historic sites, viewshed, alternative routing options, electric and magnetic field effects, socioeconomic and other related issues.
- The federal agency with the largest impact on the total route is typically chosen as the lead agency and acts as permitting coordinator for major segments on federal land. To date for Energy Gateway segments, this has been the Bureau of Land Management.

#### **What route will the Energy Gateway segments follow and are landowners aware?**

- As each segment of Energy Gateway enters the early planning phase, the first step is to identify an appropriately wide potential corridor for the line. PacifiCorp then works to inform landowners, community leaders, officials and other interested parties of the potential path. Then, with their input, the potential corridor is altered or narrowed down, developing a more optimal proposed route.
- Coordination is critical to the overall success of the project, from the initial planning stages all the way through construction. PacifiCorp places a high priority on communication with all affected or interested stakeholders, whether landowners or not. This effort extends to local planning



authorities and local governments that, in addition to watching the interests of their constituents, may be landowners in the proposed corridor.

- Rocky Mountain Power and Pacific Power, as local utilities, are the informational contact points for local outreach, siting and construction needs in their respective service areas on behalf of PacifiCorp.
- Updates on routes and status of each Energy Gateway segment can be found on the Energy Gateway Web site, [pacificorp.com/energygateway](http://pacificorp.com/energygateway).

## Design Specifics

### Why not build 765 kilovolt lines?

- The highest voltage in the Western Interconnection currently is 500 kilovolts. Integrating larger voltages into the system could raise concerns about reliability and cause additional expense, so should be done only if justified. Currently, the project does not require 765 kilovolt construction and pursuing this voltage will only occur if necessary or economically justified.
- The natural economic progression to 765 kilovolts is a step up from a 345 kilovolt system. With the existing 500 kilovolt system, however, a 765 kilovolt loop or tie line is not economically justified. Maintaining the existing 500 kilovolt system saves transformer and other substation costs, and minimizes negative impacts on neighboring utilities' systems from a higher voltage.
- This doesn't preclude all applications of 765 kilovolt line in the West, especially for longer lines or on the east side of PacifiCorp's 345 kilovolt system, but 765 kilovolt options would have to be weighed against 500 kilovolt options.

### Why not build a direct current line? Isn't it less expensive?

- While direct current (DC) lines can be more economical if going only from one point to another point a long distance away, alternative current (AC) lines are more versatile and allow other parties to interconnect less expensively for future expansion.
- Energy Gateway's hub and spoke concept anticipates the flexibility of multiple on and off ramps for resources and load. Multiple-terminal DC lines can create technical feasibility concerns,

which increase as more terminals are anticipated. This may limit the amount of load or resources such a system could serve.

- PacifiCorp will continue to study all alternatives to make sure the most cost-effective option is chosen to serve the intended need for these lines.

### Is 500 kilovolt construction safe?

- The lines can be constructed and operated safely, and these high-voltage lines are one of the standard voltages in the utility industry.
- The lines will be built to meet or exceed National Electrical Safety Standard requirements, which govern the design of lines and supply stations.
- PacifiCorp has many years of operating experience with these high-voltage systems and these new assets can be confidently and reliably integrated into the Western Interconnection.
- There is currently no conclusive scientific information that shows a link between power line electromagnetic fields (EMF) and health risks.

## Wholesale Transmission Aspects

### How can interested parties – from individual customers to those contemplating the construction of new generation resources – obtain transmission service on these facilities?

- Interested parties can subscribe for transmission service under PacifiCorp's Open Access Transmission Tariff process through the PacifiCorp Open Access Same-Time Information System (OASIS) site at [www.oasis.pacificorp.com](http://www.oasis.pacificorp.com).
- Any future communications will be posted on the OASIS site.

### Will these projects impact my current transmission service?

- This project is expected to increase the reliability and flexibility of the region's and PacifiCorp's transmission networks. Intermittent scheduled outages may be necessary to accommodate construction and tie in of these facilities to the existing grid, affecting some service during the construction phase of the project.

- These outages will comply with all regional outage notice proceedings and will be scheduled at times that minimize the impacts to transmission service to the extent reasonable.

#### Will these projects impact neighboring utilities?

- The Western Electricity Coordinating Council path rating process has specific steps that incorporate input from neighboring utilities and establish mitigation steps necessary to reduce impact on them. PacifiCorp will work with its neighboring utilities through this process to mitigate the impacts of construction, if any, on their systems.
- As proposed, Energy Gateway segments will increase the overall reliability and usability of the transmission grid as a whole.

#### What will be the rate impacts to wholesale transmission customers?

- Transmission rates will need to increase to cover the incremental cost of this new construction above and beyond capacity being built to serve retail customers.
- The new lines, however, will increase system flexibility and allow access to lower cost resource areas, even when considering the increase in transmission use rates.

## Collaboration with Others

#### How does the Energy Gateway project relate to other regional projects already underway or under consideration?

- The lines proposed as part of Energy Gateway will result in a stronger and more versatile system that will facilitate the development of additional transmission projects.
- Portions of this project also form a “keystone” that other regional projects can tie into, reducing the need for redundant transmission in the area.
- PacifiCorp continues to coordinate with other regional entities and proposed transmission projects where it makes sense and where it has the potential to benefit our customers. However, Energy Gateway will happen regardless, our customers need it and it is already under construction.

#### How will you coordinate with other groups in the region like the Western Electricity Coordinating Council, Northern Tier Transmission Group, Columbia Grid, West Connect and others?

- PacifiCorp will work through WECC and NTTG to coordinate with other utilities and sub-regional planning groups in the region. PacifiCorp also will work directly with other utilities as required to coordinate the planning and implementation of these facilities.
- The Energy Gateway project segments currently are in various stages of the WECC three-phase ratings process.

For additional information, please visit  
[pacifiCorp.com/energygateway](http://pacifiCorp.com/energygateway)

