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I. Introduction

Thank you for the opportunity to provide a written statement and testimony regarding our experience with the Department of the Interior, as well as other federal agencies, over the last ten years permitting two large energy infrastructure projects – a wind farm located in Wyoming with 1,000 turbines and a nameplate capacity of over 3,000 megawatts, and a 600 kilovolt, direct current electricity transmission system designed to deliver energy from Wyoming 730 miles to the markets in the Desert Southwest.

As background, Power Company of Wyoming LLC ("PCW") which is developing the wind farm, and TransWest Express LLC ("TransWest"), which is developing the transmission system, are both wholly owned subsidiaries of The Anschutz Corporation ("TAC"). TAC is a privately held, multi-billion dollar, highly diversified company based in Denver, Colorado. TAC has been active in the West for more than 75 years in the fields of ranching, agriculture, oil and gas development and distribution, transportation, telecommunications, hospitality and lodging, and sports and entertainment.

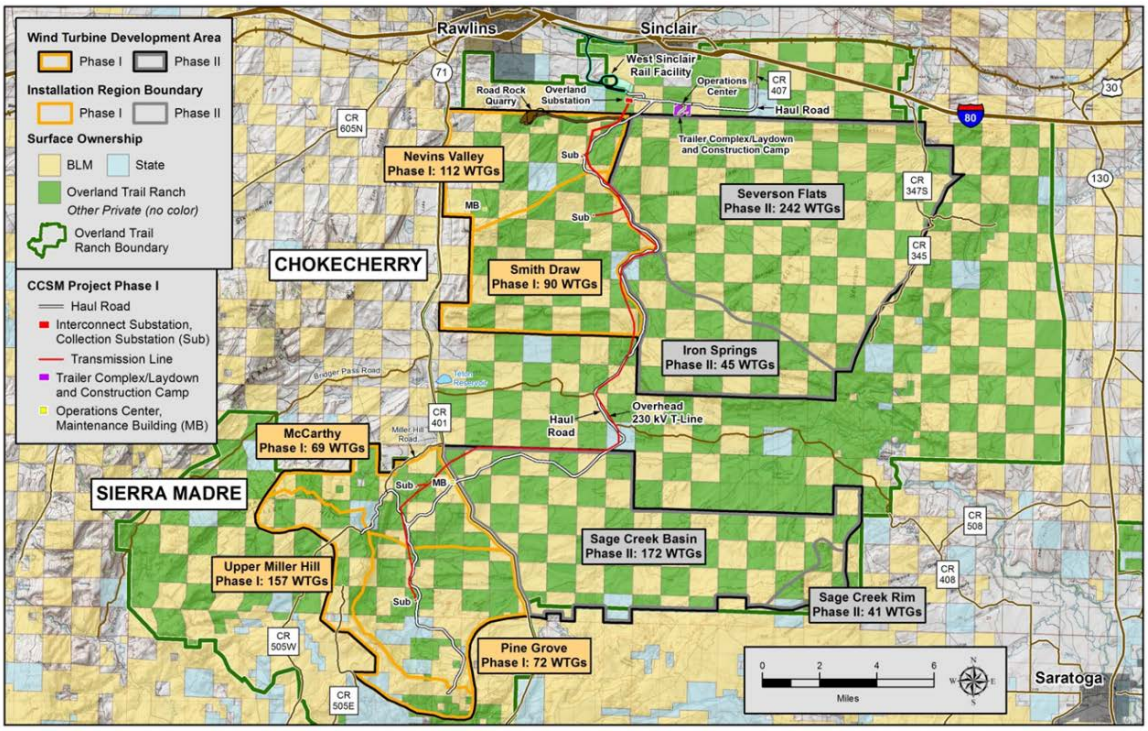
The wind farm and transmission projects together represent an $8 billion investment in critical energy infrastructure that will contribute to the reliability and deliverability of electricity in the western grid. To date, TAC has invested ten years and over $150 million of private capital in funding the development of the wind farm and transmission projects. Through the applicable permitting and regulatory processes, PCW and TransWest have worked with numerous federal agencies, including the Bureau of Land Management, United States Fish and Wildlife Service, United States Forest Service, Bureau of Reclamation, and Western Area Power Administration. The wind energy generation and energy transmission projects align with federal policies and with the goals set out in the 2005 Energy Policy Act, which called for 10,000 MW of renewable energy to be located on BLM-managed land by 2015.

II. Chokecherry and Sierra Madre Wind Energy Project

PCW's Chokecherry and Sierra Madre Wind Energy Project ("CCSM Project") is located on the Overland Trail Ranch in Carbon County, Wyoming. The Ranch is situated within Wyoming's checkerboard of primarily private and federal land, with some state land interspersed. The Ranch's private lands are owned by The Overland Trail Cattle Company LLC ("TOTCO"), another TAC affiliate, and PCW has obtained the wind development rights on the Ranch from TOTCO. The federal lands are administered by the BLM Rawlins Field Office.

A. CCSM Project Description

The CCSM Project will include up to 1,000 wind turbines with a combined nameplate capacity of at least 3,000 MW of renewable energy. It is being built in two phases consisting of 500 wind turbines, or 1,500 MW, each, along with associated roads and infrastructure such as a rail facility. The CCSM Project site features the nation's highest-intensity onshore winds. Within the turbine development areas, at typical turbine hub heights (about 90 to 100 meters above ground), the annual average wind speeds range from 8.5 to 11 meters per second. No other onshore U.S. wind project features this size and scale combined with a superior wind resource. At 3,000 megawatts of capacity, the CCSM Project will be the nation's largest and one of the largest in the world. It will provide enough competitively priced renewable electricity to serve over 1 million Desert Southwest households – while also contributing resource diversity that complements the power profile of other renewable energy sources. It is an estimated $5 billion energy infrastructure project.



B. Federal Permitting

1. BLM's Compliance with the National Environmental Policy Act

PCW has been working on completing the federal permitting for the CCSM Project for almost ten years. Due to the mix of private and federal land on the CCSM Project site, PCW applied to BLM in January 2008 for right-of-way (ROW) grants to construct, operate, maintain and decommission the CCSM Project on federal lands within the CCSM Project Area. Over the next four years, BLM conducted extensive public scoping, performed numerous studies and surveys, analyzed multiple alternatives and prepared a Draft Environmental Impact Statement for the entire CCSM Project, which was published for public comment on July 22, 2011. BLM took the

next year to review and incorporate public comments on the Draft EIS and further refine its analysis. On June 29, 2012, the Notice of Availability for the Final Environmental Impact Statement concerning the CCSM Project was published in the Federal Register (77 FR 63328). On October 9, 2012, the Secretary of the Interior signed the Record of Decision ("ROD") for the CCSM Project. In the project-wide ROD, BLM determined that over 200,000 acres within the CCSM Project Area are suitable for wind energy development – subject to the requirements described under the Selected Alternative in the ROD.

The ROD provides that, prior to issuing ROW grants, BLM must follow the tiering procedure and process that is set out in the CCSM Project ROD regarding the subsequent site-specific environmental analysis of PCW's site-specific plans of development ("SPOD"). In other words, more federal environmental screening was required for all project elements. PCW has submitted all of its Site-Specific Plans of Development SPODs for Phase I (SPODs 1 through 4).

- BLM completed the secondary tiered environmental analysis of SPODs 1 through 3 in an Environmental Assessment (EA) for Infrastructure Components (EA1) that was released for public review on August 11, 2014. The BLM issued the Decision Record and Finding of No New Significant Impacts (FONNSI) for EA1 in December 2014.

- BLM completed the secondary tiered environmental analysis of SPOD 4 in an EA for the Phase I Wind Turbine Development (EA2) that was released for public review on March 9, 2016. The BLM issued the Decision Record and FONNSI for EA2 in January 2017.

BLM also has issued the corresponding ROW grants and notices to proceed for EA1 and EA2. Therefore, with respect to Phase I, the CCSM Project is fully permitted.

On December 1, 2017, PCW submitted its SPOD (SPOD 5) for the Phase II Haul Road and Facilities to BLM for its review in accordance with the tiering procedures set out in the CCSM Project ROD. The final BLM environmental review process will be its review of SPOD 6 for Phase II Wind Turbine Development, which PCW plans to submit in 2018.

Note that PCW, as the project proponent, has fully funded the BLM's environmental analysis of the CCSM Project, through cost recovery agreements with the BLM and by paying a third-party contractor to work for the BLM in preparing the EIS. In short, there is no cost to the general U.S. taxpayer.

2. U.S. Fish and Wildlife Service Eagle Permit

While working with the BLM, at the same time, we've also been working hard to assure that our wind project avoids and minimizes potential impacts to a wide range of species, including birds, and specifically, golden and bald eagles. So, we have been working to meet the high federal conservation standards required to obtain Eagle Take Permits from the U.S. Fish and Wildlife Service ("USFWS"). This lengthy and complex process requires applicants like PCW to demonstrate they have done everything practical to avoid harming eagles – and we showed this by developing an extremely comprehensive Eagle Conservation Plan that includes mitigation for any accidental eagle takes. PCW's Eagle Conservation Plan was developed based upon years

and years of site-specific environmental scientific data gathered by professional biologists and ecologists – again, at a cost of millions of dollars in private capital.

This work was followed on June 15, 2015, by PCW submitting its Eagle Conservation Plan ("ECP") covering Phase I wind development (again, the first 500 turbines), along with its formal application for standard and programmatic Eagle Take Permits ("ETP") to USFWS. In addition, PCW submitted its Phase I Bird and Bat Conservation Strategy ("BBCS") to USFWS on August 3, 2015, to support the USFWS environmental analysis of PCW's ETP application.

In response to PCW's application, the USFWS prepared Draft and Final Environmental Impact Statements in compliance with the National Environmental Policy Act. In January 2017, the USFWS issued a ROD for Eagle Take Permits for the CCSM Project Phase I, documenting the USFWS' decision to issue both standard and programmatic ETPs for the CCSM Phase I Project. PCW received the standard eagle permit for the CCSM Project on March 9, 2017, and PCW anticipates that the USFWS will issue the programmatic permit in the fourth quarter of 2017.

PCW will continue to work with the USFWS on an Eagle Take Permit regarding Phase II, or the second set of 500 turbines. We are developing and will submit a specific, science-based ECP and a specific, science-based BBCS to cover the Phase II components, and we anticipate receiving decisions from the USFWS in 2019. Again, the environmental analysis costs are fully paid for by PCW.

C. The CCSM Project is Under Construction

After ten years of permitting, PCW was able to commence construction on the CCSM Project on September 9, 2016. Since commencement of construction, PCW has continuously constructed the CCSM Project as allowed for by its federal, state and county permit conditions.

PCW engaged Oftedal Construction Inc. of Casper, Wyoming, to complete 2016 and 2017 construction activities on the CCSM Project. These activities include constructing portions of the CCSM Project that are critical to the construction and operation of the project, such as construction of roads that are integral to the operation and maintenance of the CCSM Project, wind turbine pads, laydown areas, water stations, and temporary facilities. The workforce generally consisted of between 40 and 70 people depending on the current week's activities.

III. BLM's Competitive Leasing Rule

During the ten years that PCW has been permitting the CCSM Project, it has been subject to various legislative and regulatory changes at both the federal and state levels that have injected uncertainty into the development process and potentially impact the economic viability of the CCSM Project. One example is the BLM's Competitive Leasing Rule.

The BLM issued the final Competitive Leasing Rule on December 19, 2016, in the last few weeks of the previous administration. During the rulemaking process, numerous stakeholders raised serious concerns about the proposed rule, including the new fee structure applicable not only to future projects, but also to existing projects and those under development. Stakeholders expected the Final Rule would address their concerns, but it did not. Instead, the Final Rule

added complexity and cost to the already difficult task of developing renewable energy on public lands. Moreover, the Final Rule did not grandfather projects that were already under development from its application. It is reasonable to assume that the BLM sacrificed equity issues for existing projects and those under development to achieve one rate structure of all projects.

The Final Rule increased the administrative and regulatory burden on developing renewable energy on public lands by adding layers of complexity to what had been a fairly straightforward process and fee structure. First, the Final Rule expanded the regulations to allow BLM to use competitive leasing both inside and outside of designated leasing areas ("DLAs") and to incentivize development inside DLAs by providing: (a) a reduced nomination fee; (b) a 10-year phase-in of the MW capacity fee instead of a 3-year phase-in; (c) more favorable bonding requirements; and (d) a 30-year fixed-term lease instead of merely preferred applicant status.

Next, under the Final Rule, the BLM added a new acreage rent for wind and solar development and made changes to the MW capacity fee. Thus, the holder of a right-of-way grant from the BLM for wind and solar development is now required to pay two types of fees instead of one: (1) an acreage rental fee; and (2) a MW capacity fee based upon the nameplate capacity approved in the ROW grant. The holder of the ROW grant must then choose either a Standard Rate Adjustment or a Scheduled Rate Adjustment. Only the Standard Rate Adjustment is discussed below as, overall it is less costly than the alternative choice of Scheduled Rate Adjustment.

A. <u>The Standard Rate Adjustment Substantially Increases Fees</u>

1. Acreage Rent

The per acre rent is calculated using the following formula: (Per Acre Zone Rate) x (Encumbrance Rate of 10% for wind and 100% for solar) x (Rate of Return 5.27%) x (1.021 Current IPD-GPD Rate) = Per acre rental rate. Then, the total acreage rent is calculated by multiplying the per acre rent by the total acreage.

2. MW Capacity Fee

The MW Capacity Fee is calculated as follows: (Hours 8760) x (Net Capacity of 35% for wind or 20% for photovoltaic solar) x (MWh Price) x (Rate of Return) = MW Capacity Fee. Then, the total MW Capacity Fee is calculated by multiplying the approved nameplate capacity of the project by the MW Capacity Fee. The current MW Capacity Fee for wind is calculated as follows: (Hours 8760) x (Net Capacity Factor of 35%) x (MWh Price of $38.07) x (Rate of Return of 4.3%) = $5,010.

The MW Capacity Fee is adjusted every five years starting in 2021 by calculating a new MWh Price based upon the full 5 calendar-year average of the annual weighted average wholesale prices of electricity per MWh for the major trading hubs serving the 11 Western States. 81 Fed. Reg. at 92173, 92221. The Rate of Return will also be reviewed every five years to reflect the preceding 10-year average of the 20-year U.S. Treasury bond yield, rounded to the nearest one-

tenth percent, with a minimum rate of 4 percent. *Id.* In addition, there is a phase-in of the MW Capacity Fee as follows: Year 1 - 25 percent; Year 2 - 50 percent and Year 3 - 100 percent. *Id.*

Based upon the current MW Capacity Fee of $5,010 and no change, that is, no adjustment either upwards or downwards, over the 30 year period of the ROW Grant, the total MW Capacity Fees that PCW would pay are $226,143,046. Based upon an estimate of the forward power curve through 2025, the total MW Capacity Fees PCW would pay is $275,426,774. As summarized in the table below, under the final rule, PCWs fees would be raised under the Competitive Leasing Rule by a minimum of $47 million up to an estimated $106 million.

SUMMARY TABLE	Acreage Rent	MW Capacity Fee	Total	Additional Cost
Current	0	$179,184,375	$179,184,375 ($/MWh $1.01)	
Final Rule Standard Rate No Escalation in MW Capacity Fee	$10,093,523	$216,049,523	$226,143,046 ($/MWh $1.27)	$46,958,671
Final Rule Standard Rate with Forward Pricing Curve Estimate for MW Capacity Fee	$10,093,523	$275,426,774	$285,520,298 ($/MWh $1.61)	$106,335,923

B. Applying the Final Rule to Projects Already Under Development is Unfair

As outlined in the Final Rule, the Energy Policy Act of 2005 ("EPAct") encouraged the Secretary to approve solar, wind and geothermal energy projects with a total combined generation capacity of at least 10,000 MWs of electricity by 2015 on BLM-managed public lands. 81 Fed. Reg. at 92125. A series of Secretarial Orders in 2009 and 2010 emphasized and prioritized the development of renewable energy on public lands. *Id.*

At that time, the right-of-way fees associated with wind and solar projects were contained in instruction memoranda ("IMs") issued by the BLM in 2009 and 2011. *See* IM 2009-043, Wind Energy Development Policy and IM 2011-003, Solar Energy Development Policy. Yet, after developers relied upon these IMs that set out the applicable fees, such as the $4,155 per MW of nameplate capacity for wind projects, the Final Rule unfairly imposed significant additional fees on projects, particularly wind energy projects, that were already under development on public lands. The BLM should not now change the rules of the game on these developers that were instrumental in the Department meeting the goal set out in the EPAct for the development of renewable energy on public lands.

We encourage the Committee to look into this regulation and consider including a provision in your energy bill that would exclude projects, like ours, from application of the rule. We have shared our concerns with the Administration through the rulemaking process and as part of the regulatory reform process.

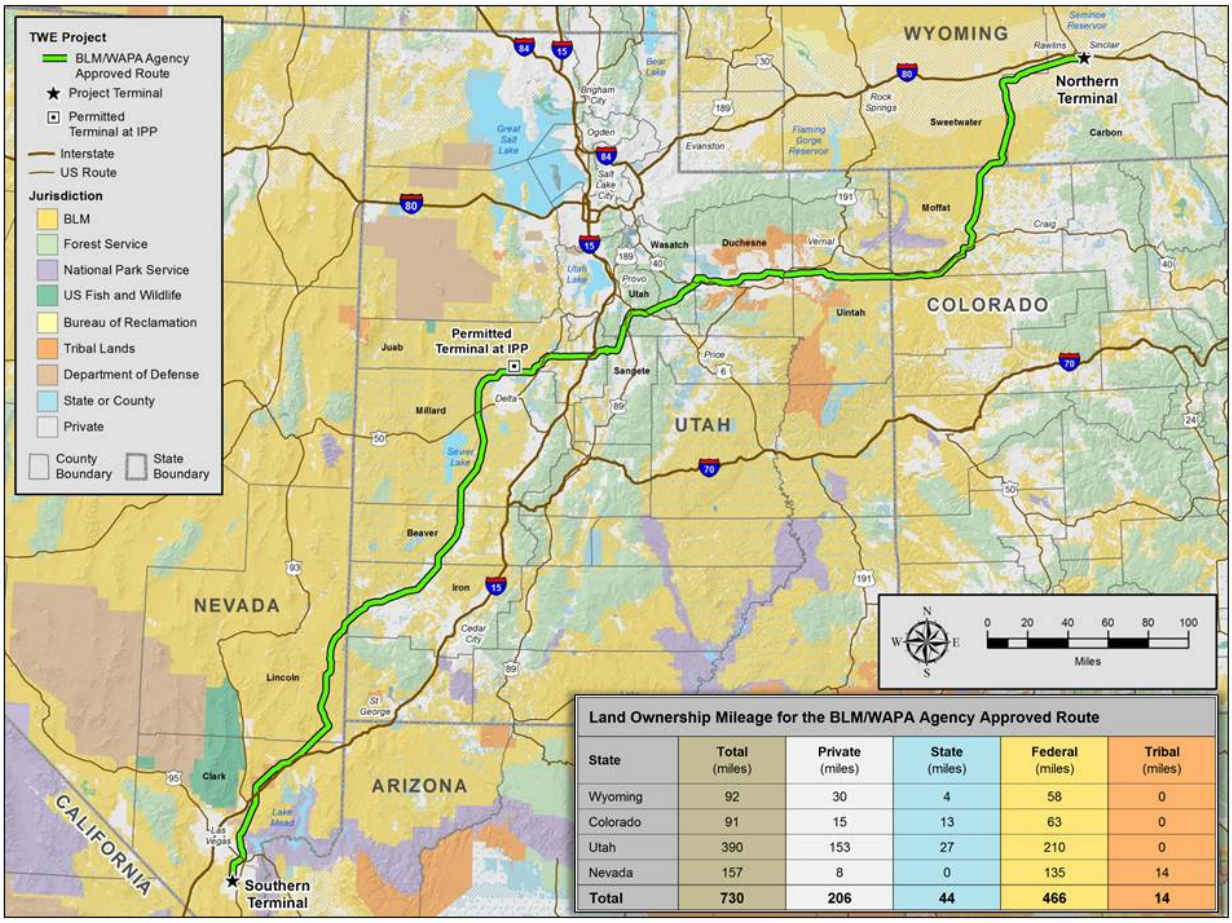
IV. TransWest Express Transmission Project

A. Project Description

The TWE Project is a 3,000 MW capacity, 600 kV, high-voltage direct current (HVDC) transmission line extending 730 miles between southern Nevada and south-central Wyoming. It is designed to provide the highly-populated states of California, Arizona and Nevada with direct access to Wyoming's high-capacity, competitively prices wind-generated and gas-generated electricity. With Wyoming's small population and small electric load, there currently is no in-state demand for the electricity that will be generated by Wyoming wind resources.

The TWE Project will provide for the efficient and cost-effective transmission of approximately 20,000 GWh per year of renewable energy from Wyoming to the Desert Southwest region. The TWE Project also represents a significant investment in strengthening the western U.S. power grid, specifically improving the linkages between the Rocky Mountain and Desert Southwest. It is an approximately $3 billion infrastructure project.

The TWE Project crosses four states, 14 counties, two national forests and 10 BLM field offices. It will begin near Sinclair, Wyoming, be routed through northwest Colorado and through central Utah in a generally southwestern direction, and then follows the eastern edge of Nevada before ending near multiple 500 kV substations about 15 miles southwest of Boulder City, Nevada. Approximately two-thirds of the proposed route is sited on federal land mainly administered by the BLM and U.S. Forest Service; therefore, the project is subject to federal environmental analysis and review before a ROW grant(s) may be authorized. It also is co-located, or sited next to, existing linear infrastructure as much as possible.



Land Ownership Mileage for the BLM/WAPA Agency Approved Route

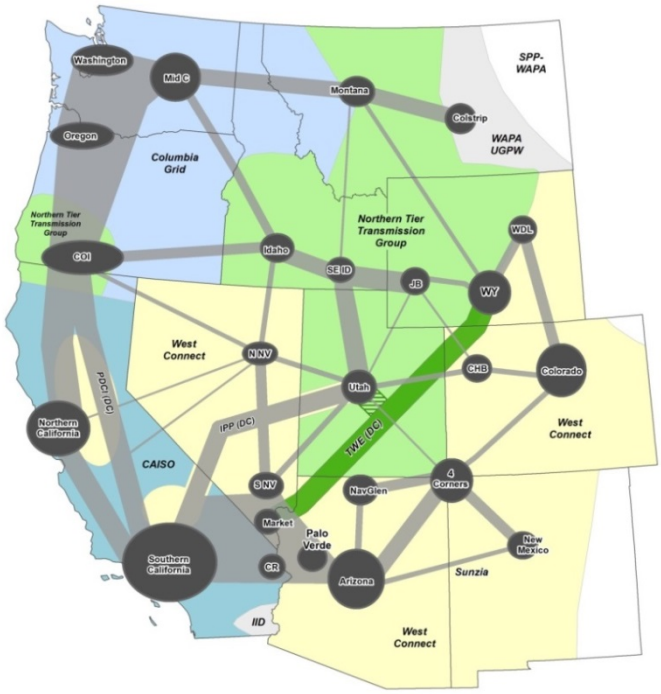
State	Total (miles)	Private (miles)	State (miles)	Federal (miles)	Tribal (miles)
Wyoming	92	30	4	58	0
Colorado	91	15	13	63	0
Utah	390	153	27	210	0
Nevada	157	8	0	135	14
Total	**730**	**206**	**44**	**466**	**14**

The fundamental purpose of the TWE Project is to provide transmission capacity between utilities in the Desert Southwest and the high-quality energy resources in Wyoming. The existing transmission grid has insufficient available capacity to make this connection. As a result, the TWE Project is planned to connect directly to the 500 kV Desert Southwest market transmission hub in southern Nevada, referred to as the Marketplace Hub.

However, the TWE Project also is designed to take advantage of an alternate, additional transmission hub located in central Utah near the Intermountain Power Project Station ("IPP") in Delta, Utah. IPP is interconnected to the 345 kV AC network in central Utah as well as to the IPP Southern Transmission System ("STS") 2,400 MW, two-terminal, 500 kV, HVDC line that terminates near Los Angeles. The final TWE Project configuration will depend on the interest in and availability of capacity by the market participants at each hub, as well as the potential for new market hubs being developed through other planned transmission projects.

TWE Project Expands Capacity, Connectivity of Western Power Grid

A "pipe diagram" of the Western Interconnection shows that the bulk of the existing transmission capacity, shown in gray, is built along the coast in a "C." It also shows there is limited capacity between the California/Desert Southwest and Intermountain regions. Limited capacity means there is limited access to both diverse energy resources and to diverse load areas. However, adding a 3,000 MW DC line like the TWE Project, shown in green, directly between those regions would quadruple transmission capacity.



TransWest has entered into partnering agreements for the development and construction of the TWE Project with the International Brotherhood of Electrical Workers and the International Union of Operating Engineers. In addition, TransWest has entered into coordination and partnering agreements with the Ute Indian Tribe of the Uintah and Ouray Reservation for the construction of the TWE Project in eastern Utah.

B. Federal Permitting

Approximately two-thirds of the route for the TWE Project is sited on federal land managed by the BLM, U.S. Forest Service and Bureau of Reclamation. On November 30, 2007, the initial project proponents submitted to the BLM an application for a right-of-way grant over this federal land. TransWest acquired the development rights to the TWE Project in July 2008, and on December 12, 2008 – or nine years ago – TransWest submitted an amended ROW application to continue the environmental analysis.

In 2010, Western Area Power Administration, a power marketing agency of the U.S. Department of Energy, proposed to participate as a joint owner in the TWE Project under its Transmission Infrastructure Program. Therefore, the BLM and WAPA prepared the EIS as joint lead federal agencies. The U.S. Forest Service and four dozen other federal, state and local cooperating agencies participated in the development of the EIS.

The Draft EIS published July 3, 2013, and the Final EIS published May 1, 2015. BLM and WAPA each issued a Record of Decision that documents the agency's decision pursuant to its unique purpose and need, including any required conditions. The BLM ROD issued on December 13, 2016, and the WAPA ROD issued on January 13, 2017, with the USFS ROD and

the BOR ROD published soon thereafter in 2017. On June 23, 2017, the TWE Project received the BLM ROW grant – over eight years after the ROW application was filed on December 12, 2008.

C. Remaining Permitting and Right-of-Way Requirements

With the federal decisions completed, TransWest has been able to move forward with securing the rights-of-way over the private and state lands along the route. It is also moving forward to complete state and local permitting. Two states, Nevada and Wyoming, have state permitting processes. TransWest has already obtained conditional approval of the Nevada state permit and plans to apply for the Wyoming state permit in 2018. Next, TransWest must obtain a permit in every county that the route crosses in each of the four states. The transmission line crosses 2 counties in Wyoming, 1 county in Colorado, 9 counties in Utah and 2 in Nevada for a total of 14 counties.

V. Western Area Power Administration

WAPA has been partnering with TransWest for the past seven years. WAPA is one of four power marketing administrations within the U.S. Department of Energy. Congress created WAPA in 1977 authorizing it to market and transmit electric power generated by federal hydropower generation projects operated by the United States Army Corps of Engineers, the Bureau of Reclamation, and the International Boundary and Water Commission. WAPA markets and delivers hydroelectric power and related services within a 15-state region of the central and western U.S. WAPA's transmission system carries electricity from 57 power plants with an installed capacity of 10,295 MW.

In 2009, the Hoover Power Plant Act of 1984 was amended to grant WAPA the authority to borrow up to $3.25 billion from the U.S. Treasury Department for the purpose of constructing, financing, facilitating, planning, operating, maintaining, or studying construction of new or upgraded electric power transmission lines and related facilities (i) that have at least one terminus within the area served by WAPA and (ii) that deliver or facilitate the delivery of power generated by renewable energy resources constructed after February 2009.[1]

To implement its borrowing authority, WAPA developed the Transmission Infrastructure Program. The TIP provides project and program principles to guide WAPA's funding of partnerships to develop transmission infrastructure that delivers renewable energy to markets across the West. Projects that WAPA participates in must meet these criteria:

- Facilitate delivery to market of power generated by renewable resources constructed or reasonably expected to be constructed.
- In the public interest.
- Will not adversely impact system reliability or operations, or other statutory obligations.
- Reasonable expectation that the project will generate enough transmission service revenue to repay the principal investment; all operating costs, including overhead; and accrued interest.

[1] Hoover Power Plant Act of 1984, 42 U.S.C. § 16421a - Western Area Power Administration borrowing authority.

- Have at least one terminus within WAPA's service territory.
- Provide economic development benefits, including job creation.
- Satisfy WAPA's Open Access Transmission Tariff.
- Technical merits and feasibility.
- Financial stability and capability of potential project partners.
- Project readiness.
- Participation in region-wide or interconnection-wide planning groups or forums.

In April 2009, TransWest submitted a response to WAPA's request for proposals under the TIP program. WAPA determined that the TWE Project met the criteria; therefore, in 2010 WAPA and TransWest entered into a non-binding term sheet. Subsequently, in April 2010, WAPA and TransWest entered into a Memorandum of Understanding. The MOU provides that WAPA will act as a joint lead agency with the BLM in the preparation of the EIS, provides that both parties will use commercially reasonable efforts to execute an Interim Development Agreement, and outlines the parties' relationship until the IDA is executed.

On September 9, 2011, WAPA and TransWest entered into a Development Agreement. Under the terms of the development agreement, TransWest and WAPA agreed to each pay up to $25 million to complete the development phase. However, on June 17, 2014, WAPA and TransWest executed an amendment to the Development Agreement that requires TransWest to fund 100% of the development costs of the TWE Project commencing on January 1, 2014. As a result, through the end of 2013, WAPA funded approximately $18 million in development costs.

WAPA's participation in the TWE Project's development phase has been without any risk to the U.S. taxpayer. At any point in time during the development phase – should Western ultimately decide not to participate in the construction and ownership of the TWE Project for any reason, Western's development costs will be fully refunded, with interest, by The Anschutz Corporation, which has not only signed a Guaranty agreement, it has also provided Western with an irrevocable letter of credit to back up the Guaranty.

However, WAPA has not yet made a decision on its final participation in the TWE Project. Having the certainty of WAPA's participation would assist TransWest in determining how best to advance multiple development decisions related to state and local permitting, commercial operations, project costs and other important factors.

VI. Fixing America's Surface Transportation Act

Fixing America's Surface Transportation ("FAST") Act was signed into law on December 4, 2015 (Pub. L. 114-94, §41007 (2015)). In May 2016, TransWest was notified by the Wyoming State Office of the Bureau of Land Management that the TWE Project was identified as a potential "covered project" under Title 41 of the Fixing America's Surface Transportation ("FAST") Act. TransWest also received this same notification from WAPA in July 2016.

In fact, both the CCSM Project and the TWE Project met the criteria for inclusion in the FAST-41 program. The FAST Act applies to "Covered Projects" which meet the following criteria:

- any activity in the United States that requires authorization or environmental review by a Federal agency involving construction of infrastructure for renewable or conventional energy production, electricity transmission … that is subject to the National Environmental Policy Act
- is likely to require a total investment of more than $200 million; and
- does not qualify for an abbreviated authorization or environmental review process.

On September 22, 2016, Richard Kidd, Executive Director of the Federal Permitting Improvement Council, included both the CCSM Project and the TWE Project in a memorandum designating Covered Projects included in the FAST-41 program. There are several potential benefits of being designated a Covered Project. First, the statute of limitations to challenge an agency decision is two years after the date of publication in the Federal Register of the final record of decision or approval or denial of a permit. This replaces the general statute of limitations of six years. Second, the FAST Act provides that as part of any preliminary injunction standard, the court shall consider the following additional element:

> Consider the potential effects on public health, safety, and the environment, and the potential for significant negative effects on jobs resulting from an order or injunction; and Not presume that the harms described in [the preceding] paragraph [] are reparable.

These provisions give developers more certainty that any challenges to agency decisions will be raised within a reasonable amount of time, two years instead of six years, and that the court will consider a wider range of the effects of enjoining a project when determining whether a preliminary injunction is appropriate.

VII. Opportunities to improve federal efficiency, transparency and accountability

The Committee asked for input on "opportunities to improve the efficiency, transparency, and accountability of federal decisions" for energy and resource infrastructure projects. Based on our experience with two large multi-jurisdictional energy and resource projects, the process could be improved through increased consistency, coordination, clear line authority, utilization of basic project management tools, and accountability.

One of the greatest challenges we encountered is consistency. Due to the complexity of the projects, long development and permitting timeframes, and the many jurisdictions involved, the projects were faced with ever-changing policies and the inconsistent application of policies between agencies and within agencies. The lack of coordination and communication across jurisdictions was a cause of inconsistent application of policies. This lack of communication between agencies and within agencies, as well as between agencies and stakeholders led to increased confusion and timeframes for approval.

During the TWE Project, multiple attempts at coordination and communication were made with mixed results. Although routine coordination calls were held weekly and monthly, after more than five years of these calls, major issues remained unresolved as decisions were only finalized if there was a "consensus." Many unresolved issues were due to differing opinions and interpretations by agency personnel that were not resolved until senior level agency personnel were involved. Ultimately, the lack of timely issue resolution resulted in substantially increased

project permitting times and costs. It became evident that although the efforts at coordination and communication were important, to be effective they must be combined with a senior level position or team with decision making authority.

We also observed and experienced a high rate of staff turnover within the federal agencies, leading to "starting over" on various issues on a frequent basis. For example, all of the BLM State Directors, all of the BLM district managers, all of the BLM project managers and many of the BLM resource specialists have turned over at least once and often more than once over the course of the permitting of our projects. This turnover inevitably led to a loss of momentum as new personnel assigned to the projects had to get up to speed with the environmental analysis work that was done and the work that needed to be done. We observed this pattern at other federal agencies as well. In sum, consistency in personnel assigned to projects and project managers and teams with decision making authority are needed to provide consistent guidance and implementation across multiple jurisdictions and projects.

Finally, agencies should be implementing basic project management tools such as budgets and schedules and should be held accountable for meeting them.