

APPENDIX I

Natural Resources & Energy Supply

Reference

Bonneville Power Strategic Plan

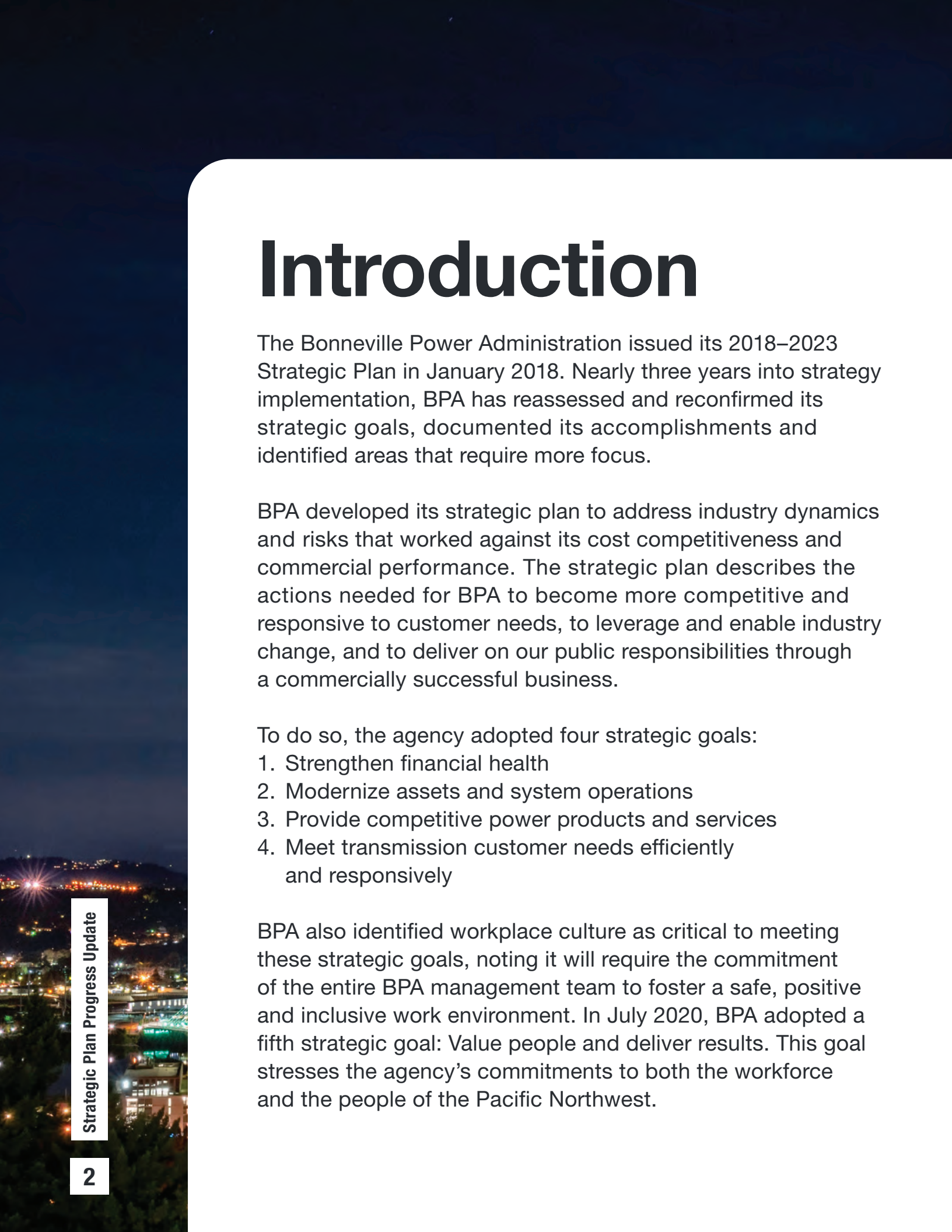


BONNEVILLE POWER ADMINISTRATION

Strategic Plan | Progress Update

2018–2023



A nighttime photograph of a cityscape with lights reflecting on water, serving as a background for the left side of the page.

Introduction

The Bonneville Power Administration issued its 2018–2023 Strategic Plan in January 2018. Nearly three years into strategy implementation, BPA has reassessed and reconfirmed its strategic goals, documented its accomplishments and identified areas that require more focus.

BPA developed its strategic plan to address industry dynamics and risks that worked against its cost competitiveness and commercial performance. The strategic plan describes the actions needed for BPA to become more competitive and responsive to customer needs, to leverage and enable industry change, and to deliver on our public responsibilities through a commercially successful business.

To do so, the agency adopted four strategic goals:

1. Strengthen financial health
2. Modernize assets and system operations
3. Provide competitive power products and services
4. Meet transmission customer needs efficiently and responsively

BPA also identified workplace culture as critical to meeting these strategic goals, noting it will require the commitment of the entire BPA management team to foster a safe, positive and inclusive work environment. In July 2020, BPA adopted a fifth strategic goal: Value people and deliver results. This goal stresses the agency's commitments to both the workforce and the people of the Pacific Northwest.



#1

**STRENGTHEN
FINANCIAL HEALTH**

#2

**MODERNIZE
ASSETS &
SYSTEM OPERATIONS**

#3

**PROVIDE
COMPETITIVE POWER
PRODUCTS & SERVICES**

#4

**MEET TRANSMISSION
CUSTOMER NEEDS
EFFICIENTLY & RESPONSIVELY**

#5

**VALUE PEOPLE
& DELIVER RESULTS**



The fifth strategic goal:

Value people and deliver results

In this dynamic energy industry, the needs of BPA's customers are ever-changing, and so are the demands on our workforce. We know that our customers are relying on us more than ever to anticipate their needs and respond with a sense of urgency so that they can meet the demands of their own customers. BPA needs a vibrant and engaged workforce to meet these high expectations. The agency is developing a three-part People and Culture Strategy that will outline investments in BPA's culture, workforce and capabilities so that we can deliver on our strategic goals.

This document is being developed in stages, with the first of three parts being the Culture Strategy. The Culture Strategy defines four key focus areas designed to enhance the BPA community: developing leaders, building on existing programs, building a resilient culture and measuring progress.

The Workforce Strategy will build on an existing effort to define the optimal composition and size of BPA's workforce. This effort informs the size of BPA's ongoing federal workforce, as well as BPA's strategy and use of supplemental labor. The Capability Strategy will articulate the capabilities that we must cultivate to continue to deliver on BPA's mission into the future.

With the release of the Culture Strategy, BPA adopted a fifth strategic goal: Value people and deliver results – Build a safe, positive and inclusive culture where everyone can thrive, and a workforce with the capabilities to deliver on our mission and strategy. This captures both our commitments to the workforce and our constituents.

People and Culture Strategy





What's changed

The industry in which BPA operates continues to evolve. Since the plan's release, we have already witnessed significant change.

Resource adequacy

BPA's strategy assumed a future of relatively low wholesale energy prices and declining costs of alternative sources of supply, but noted the possibility of an increasing demand for clean capacity. Given the rapidly changing resource mix, the growing demand for carbon-free capacity has in fact emerged as a critical issue for the region and entire Western Interconnection.

With coal plants retiring more quickly than previously anticipated, the Northwest faces a potential shortfall of several gigawatts of capacity to

serve load. At the same time, renewable, carbon-free generating resources are being constructed in the region. These can produce significant energy in the right conditions, but they do not share the long-term capacity attributes of the resources they are replacing to ensure resource adequacy.

BPA is participating in an effort coordinated through the Northwest Power Pool to develop a resource adequacy program. This initiative seeks to design a program to define how much dispatchable capacity is needed and increase transparency regarding the accountability for carrying that capacity. The program will also look at deliverability and will consider ways

to take advantage of regional diversity to help participants meet obligations and be as efficient as possible with existing resources.

Developing a resource adequacy program will need to apply across a diverse set of load-serving entities within the Northwest Power Pool footprint. Such a program may create new opportunities to monetize the flexible capability of the federal hydropower system and serve as a resource in the event BPA determines it has a need for power.

COVID-19

The full impacts of COVID-19 on BPA and its utility customers will not be fully known for some time, but BPA has been proactive in taking action to help our customers. The agency took the significant step of suspending the Financial Reserves Policy surcharge for the remainder of the FY 2020–2021 rate period, effective July 1, 2020, through Sept. 30, 2021. BPA implemented the surcharge in FY 2020 to help rebuild financial reserves to the minimum days cash on hand. This surcharge was triggered for Power Services in FY 2020 so its suspension saved power customers \$3 million a month for the rest of FY 2020 (resulting in a total reduction of \$9 million in FY 2020) and avoided any possibility of the surcharge triggering in FY 2021. In addition, BPA has streamlined its approach for extended payment arrangements for those customers who need it. While this decision slowed our effort to rebuild Power Services' financial reserves, BPA remains committed to its longer-term objective of building financial resiliency.

Even as the industry in which BPA operates evolves, our vision endures. We aim to serve as an engine of the Northwest's economic prosperity and environmental sustainability.

BPA's capital spending has slowed as a result of the pandemic. In March 2020, BPA's workforce began operating primarily on a virtual basis, with only mission essential employees reporting to the workplace. Field work on all but the most critical capital projects was paused. This work restarted in phases starting in June, but in August some non-mission essential capital projects were put on pause again to protect BPA's workforce. While we made some progress on our capital program through the remainder of the fiscal year, we did not achieve the levels of capital spending expected at the beginning of the year given the realities of working during a pandemic. In order to achieve the infrastructure goals of the capital programs, Power and Transmission Services are working diligently to execute on capital objectives in FY 2021.

Wildfires

The occurrence and ongoing threat of wildfires in the Pacific Northwest is a growing concern for transmission providers. BPA has published a Wildfire Mitigation Plan (WMP) that describes actions BPA is taking to prevent its transmission lines and other assets from sparking wildfires, and to protect BPA lines and assets from the threat of wildfires.

This multi-pronged plan combines world-class vegetation management, strategic asset management, risk-based planning, and real-time situational awareness and operations with an increased focus on wildfire prevention. The WMP builds on 2019 wildfire mitigation efforts and incorporates wildfire mitigation into Transmission Services' Strategic Asset Management Plan.

BPA has adapted its criticality-health-risk program to include consideration of wildfire risk, and prioritizes maintenance activities within this framework. BPA's WMP is a living document that will be formally updated every two years in alignment with BPA's Strategic Asset Management Plan.

While BPA did experience damage to multiple transmission lines and other facilities, we believe our efforts before fire season helped mitigate the effects of the fires. As we learn more about how those efforts may have dampened the impact of the 2020 fires, we will modify our plan appropriately.



Strategic goals:

Overview of progress and areas of focus

Despite the significant changes in the energy landscape, BPA has reconfirmed that its existing strategic goals and objectives are critical to achieving long-term success. The agency has made significant progress toward each goal and objective, but recognizes more work is needed.



#1 Strengthen financial health

a. Improve cost-management discipline

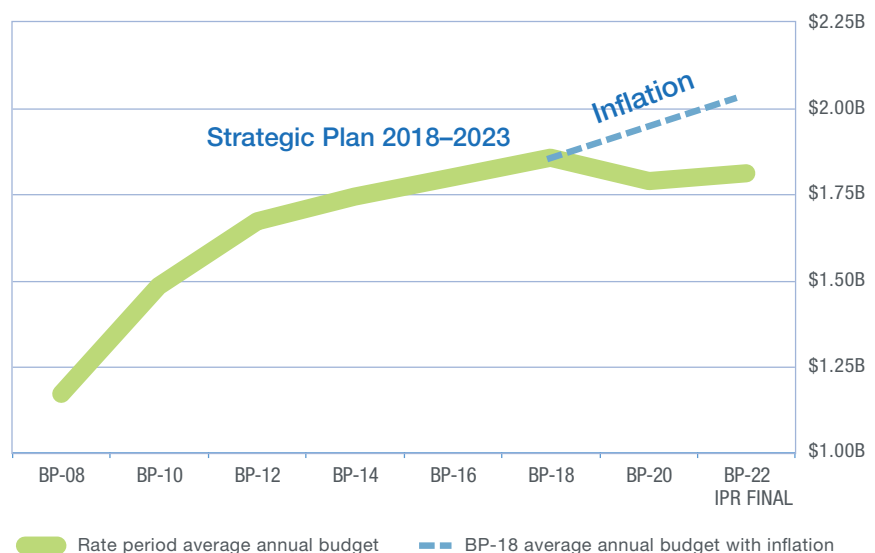
BPA has made significant progress in managing the rising costs of operating the federal power and transmission system. BPA is focused on meeting its financial commitments and has launched a number of initiatives that aim to streamline processes, adopt industry best practices and focus on delivering the most efficient programs possible.

Since it issued the 2018–2023 Strategic Plan, BPA has demonstrated a commitment to cost discipline by holding program costs significantly below inflation. The figure below shows BPA's program cost trajectory compared to where costs would be if they had increased at the rate of inflation after BPA issued its Strategic Plan in 2018

BPA not only focused on its expenses but also had an eye on its capital programs. Improved forecast modeling and project prioritization both internally and in collaboration with federal partners have helped put BPA on a trajectory that optimizes its capital spending levels. Transmission Services has also taken new approaches and creative partnerships to address system needs

Bending the cost curve

Average annual program costs in billions of dollars



at lowest costs, including the Hooper Springs project with Lower Valley Electric. Capital improvements are discussed further under strategic goal 2.

b. Build financial resiliency

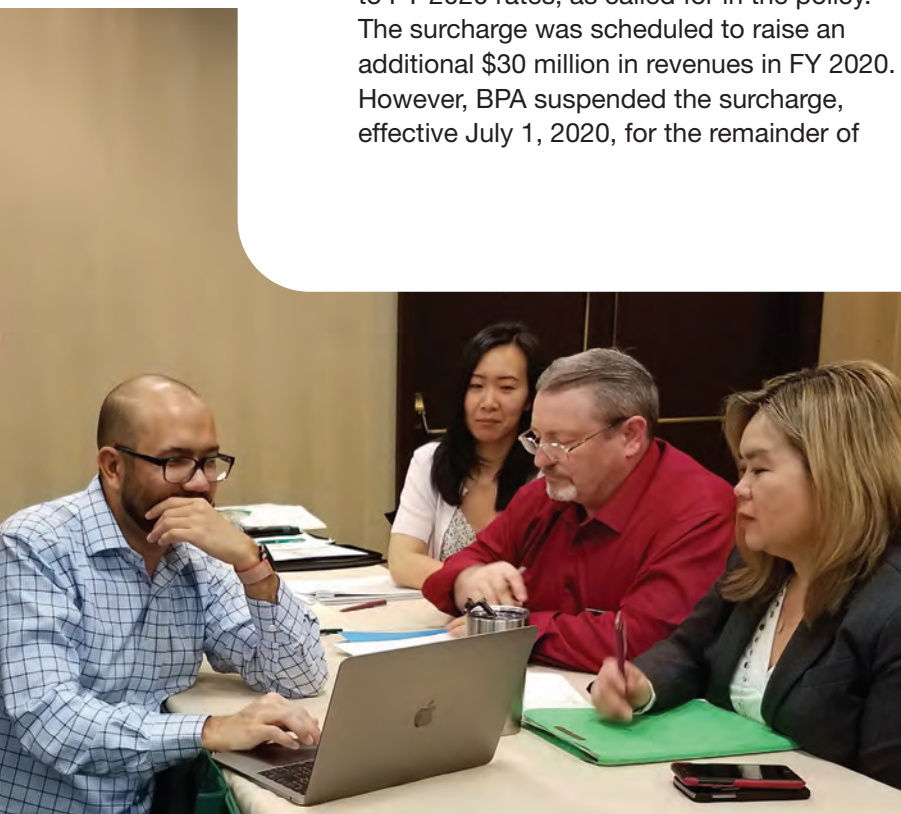
In 2018 BPA advanced its efforts to increase financial resiliency by publishing a new Financial Plan outlining several financial health goals focused on four main areas: cost management; debt utilization; debt capacity; and liquidity. BPA started implementation of three of these goals through the 2018 IPR and BP-20 rate case resulting in two new policies associated with the goals of the Financial Plan — the Financial Reserves Policy (FRP) and the Leverage Policy — as well as cost management commitments through the IPR.

The FRP helps to ensure BPA has sufficient base liquidity, with the objective of having at least 60 days cash on hand for each business line. Transmission ended FY 2019 well above the target of 60 days cash on hand, with 170 days. At the end of FY 2019, Power's days cash on hand had increased to 43 days but was below the 60 days threshold. Accordingly, the FRP surcharge triggered and was applied to FY 2020 rates, as called for in the policy. The surcharge was scheduled to raise an additional \$30 million in revenues in FY 2020. However, BPA suspended the surcharge, effective July 1, 2020, for the remainder of

the rate period due to the regional economic impacts of COVID-19. This resulted in BPA suspending collection of the remaining \$9 million of the \$30 million expected to be collected in FY 2020.

BPA did not take the decision to suspend the surcharge lightly after working so diligently in recent years to build financial strength and liquidity. But it was the right decision for the time, given the fact that our customers were using their own cash reserves, cutting costs and taking other measures to weather the COVID-19 crisis. Suspending the surcharge for the remainder of the rate period, coupled with other payment flexibilities offered on a case-by-case basis, has provided much needed financial relief.

At the time of the 2018 Financial Plan publication, BPA was facing a leverage ratio of about 90% compared to the industry average of 54%. Over the last few years BPA has taken several measures to help bring this ratio down. First, Power Services has paid more debt than it borrowed the last few years helping to drive down total outstanding debt resulting in a lower debt-to-asset ratio. Second, Transmission Services rates included additional money to make extra debt payments during the BP-20 rate period. These payments coupled with lower capital spending over the last few years has helped Transmission Services maintain its ratio. The Leverage Policy defines a plan that



enables a declining debt-to-asset ratio over the coming years. Moreover, it outlines the longer-term goal of obtaining a debt-to-asset ratio at the 60% to 70% level to better align BPA's leverage with industry benchmarks. At the end of FY 2019, BPA's agency debt-to-asset ratio was 82%*, meeting the near-term objective of achieving a debt-to-asset ratio of 75% to 85% through 2028.

The Financial Plan called for maintaining sufficient debt capacity to fund BPA's capital programs on a rolling 10-year basis, and preserve \$1.5 billion of available financing from the U.S. Treasury. At the time of publication, BPA had \$2.7 billion* remaining borrowing authority with a forecast of fully depleting that by 2023. Due to lower capital spending the last few years, the forecast to run out of borrowing authority has shifted slightly, but this issue remains one BPA needs to start tackling soon. At the end of FY 2019, BPA had \$2.4 billion in available U.S. Treasury borrowing authority remaining, compared to the goal of maintaining at least \$1.5 billion. In fall 2020, BPA hosted a public workshop with its latest access to capital forecast and plan to maintain at least \$1.5 billion of U.S. Treasury borrowing authority over the next 10 years.

** FY 2019 numbers will be updated in November with FY 2020 end-of-year results.*

c. Independent financial health assessment

All three major ratings agencies (Moody's, Fitch and S&P) continue to rate BPA-backed bonds as high investment-grade.

Fitch Ratings changed BPA's outlook from stable to negative, citing declining reserves combined with the suspension of the FRP surcharge, which is seen as an indicator of intense rate pressure and the magnitude of the COVID-19 impact on the economy. Moody's downgraded BPA's rating from Aa1 with a negative outlook to Aa2 with a stable outlook, citing the agency's decreasing cash on hand and declining availability of U.S. Treasury borrowing authority. This brought Moody's rating of BPA in line with the other two ratings agencies, and BPA does not expect to see an appreciable impact on the pricing of, or market for, BPA-backed bonds.

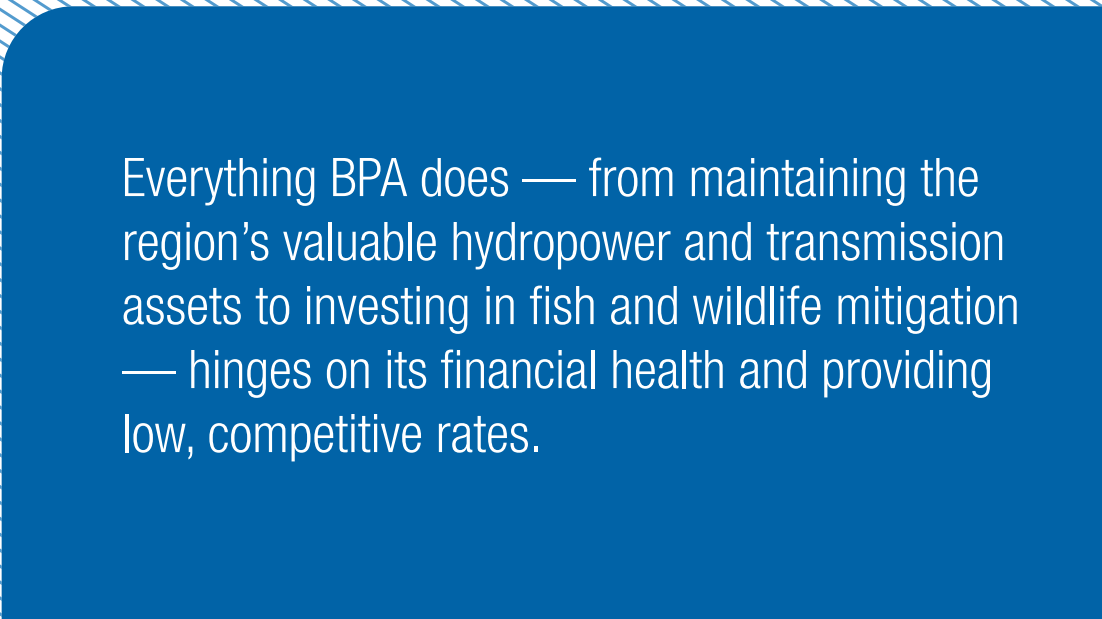
BPA's ratings as of October 2020

MOODY'S:
Aa2 (stable)

S&P:
AA- (stable)

FITCH:
AA (negative)





Everything BPA does — from maintaining the region's valuable hydropower and transmission assets to investing in fish and wildlife mitigation — hinges on its financial health and providing low, competitive rates.

BPA must continue its focus on cost management and its Leverage and Financial Reserves policies to continue to strengthen the agency's financial health. Declining days cash on hand, an increasing leverage position, and rate pressure due to COVID-19 and other areas are all factors that could result in a downgrade.

Areas of focus going forward

The COVID-19 pandemic highlighted the continuing need for financial resiliency. BPA expects to have the liquidity needed to weather through this crisis in the near-term, but the agency must maintain a focus on its long-term financial health and remains committed to its strategic and financial plans. While the agency has suspended the FRP surcharge for the rest of the BP-20 rate period due to the pandemic, the agency remains committed to building its liquidity over the long-term. Further, the agency remains committed to addressing the level of debt it carries as well as ensuring long-term access to capital to fund future needs.





#2 Modernize assets and system operations

a. Administer an industry-leading asset management program

BPA has made significant progress in implementing the principles and practices of ISO-55000, the international standard designed to improve the value an organization gains from its asset base. Implementing ISO-55000 principles and practices is a cultural and strategic shift in BPA's asset management program with an increased emphasis on data-driven investment and maintenance decisions to ensure risks are managed to achieve the desired business outcomes.

BPA has developed strategic asset management plans for six asset categories (Power, Transmission, Facilities, IT, Fleet, and Environment, Fish and Wildlife). These plans connect the asset management strategies to BPA's business strategy, and are updated biennially to support the Integrated Program Review cycle. Through these plans, we have built a solid foundation to strategically plan for future investments.

b. Modernize federal power and transmission system operations and supporting technology

BPA has made significant progress to modernize federal power and transmission operations and the supporting technology. Our portfolio of 35 grid modernization projects is designed to

BPA sells its products and services at cost, giving its customers access to 22,000 megawatts of clean, reliable hydropower across 15,000 miles of transmission lines.

increase automation, improve accuracy, and enhance visibility into how the federal power and transmission systems are functioning in real time. These enhancements are expected to produce additional capacity which can supply additional sales, manage grid congestion more efficiently and reliably, and provide insights into how best to invest in the system to unleash future value.

We have made great strides, completing nine projects to date. These projects are already delivering system value, such as the completion of One BPA Outage in 2020. This project implemented a new process to coordinate transmission outages across the agency, which has already led to millions of dollars in savings from reduced outage times and more efficient use of labor. An additional 25 projects are in flight, and one more is scheduled to start in 2023. Each project goes through rigorous scoping to ensure that all features and

integrations are well thought out before seeking a solution. This ensures that when we implement a technology or process solution, our delivery goes smoothly, on time and on budget, and the organization is well-prepared for the new solution. While COVID-19 has introduced some delays, we have worked creatively to find ways to continue moving the projects forward safely and have managed to prevent significant delays in completion of the projects.

Many of the grid modernization projects are critical to participate in the Western Energy Imbalance Market. BPA took an important step toward joining the EIM by signing the EIM implementation agreement in 2019 after completing a thorough stakeholder process. Since then, we have kicked off five new EIM-specific projects and hired an EIM integrator to support our implementation. Work is underway to ensure we meet our proposed March 2022 go-live date.



Areas of focus going forward:

Asset Management is focused on three objectives for the near future. The first is to expand and enhance criticality, health and risk (CHR) capabilities to enable efficient and effective decision-making and improved strategic planning. The second objective is to use CHR information to set asset performance objectives that balance the most critical risks and produce the highest return on investment. The final objective is to establish and prioritize maintenance activities and capital projects through the implementation of an improved analytical method that includes governance, process and decision criteria.

BPA continues to monitor the potential for delays that could occur due to supply chain slowdowns and construction stand downs caused by the pandemic, and those risks will be managed to ensure the least impact on delivering projects on time and on budget. We are continually evaluating prioritization of work to make sure we are getting the most benefit for the dollars invested.

In October 2019, BPA kicked off Phase III of its five phase decision to join the EIM. Phase III focuses on a set of policy decisions that need to be made either ahead of the rate and

tariff proceedings or will be decided in those processes. Customers and constituents have been engaged in these discussions on issues such as how to allocate EIM charge codes when costs are incurred in the market. BPA intends to issue a final decision document on four of those policy issues in fall 2020, ahead of the initial proposals for the BP-22 Rate Case and TC-22 Terms and Conditions Tariff Proceeding.

BPA is also participating in California Independent System Operator stakeholder processes to evaluate new market opportunities where BPA can sell its surplus power and maximize the value of the system. One of those initiatives is the extended day-ahead market (EDAM) initiative which proposes to extend elements of CAISO's existing day-ahead market to EIM entities. BPA believes EDAM has the potential to be a positive step toward a more comprehensive, well-designed market that will compensate the capacity value of flexible, carbon-free hydropower. This process is in the early design phase. If BPA should choose to move forward with joining EDAM it would manage a public process to evaluate that decision.

#3

Provide competitive power products and services

a. Increase power revenues through new market opportunities for clean capacity

BPA has made efforts to increase power revenues through new market opportunities for clean energy and capacity. For example, BPA executed two 5-year contracts selling 300 MW of surplus capacity. Not counting energy sales, these deals add new fixed payments that from FY 2021–2026 will total over \$90 million. BPA has used its marketing and operational expertise during market volatility to achieve incremental surplus revenue and mitigate purchase cost exposure. Additionally, BPA continues to leverage its intertie transmission by actively marketing surplus energy and capacity at a premium to both traditional utilities and the recently established Community Choice Aggregation programs in California. Lastly, BPA has taken advantage of new opportunities for ancillary and control area services.

b. Address market and regulatory barriers to capturing the clean energy and capacity value of the Federal Columbia River Power System

Congress recently granted BPA authority to purchase carbon allowances in state carbon pricing programs. Previously BPA relied on third-party arrangements to sell surplus power to the California Independent System Operator. The grant of new authority removes the need for those arrangements, providing cost savings and efficiency gains that could be substantial,

especially in years with large surplus sales. It also removes a potential hurdle for BPA's full participation in the Western Energy Imbalance Market.

c. Prioritize fish and wildlife investments based on biological effectiveness and mitigation for FCRPS impacts; and manage fish and wildlife program costs at or below inflation, inclusive of new obligations and commitment

The Environment, Fish and Wildlife organization is doing its part to align the Fish and Wildlife program with the agency's strategic goals. In the BP-20 Rate Case, BPA adopted a \$30 million reduction in spending for the Fish and Wildlife Program to cover the bulk of costs associated with increased spill (discussed below). Concurrently, through the collaborative partnerships BPA maintains regionally, the program has managed evolving mitigation responsibilities and commitments through cost-management and efficiency actions. In alignment with the plan, the budget for the Fish and Wildlife Program has not increased since BP-20, which requires absorbing inflationary increases locked into agreements and annual contracts.

Agreements with regional partners, such as the Fish Accord extensions and wildlife settlements, have facilitated this active cost management by establishing spending level caps, streamlining regional and contracting procedures, and allowing for deferral of spending when funding is



tight. States, tribes and three federal agencies agreed to extend the historic Columbia Basin Fish Accords in 2018, providing more than \$400 million for fish and wildlife mitigation and protection. The alignment derived from these agreements helps BPA get the highest value for the fish and wildlife investments we make in the region.

EFW, including the Fish and Wildlife program, is actively supporting the agency's financial objectives while meeting mitigation responsibilities. Investments in fish and wildlife protection, mitigation and enhancement will continue to be prioritized based on biological needs and cost-effectiveness, and their connection to mitigating for impacts of the FCRPS. These investments are informed by commitments for ESA-listed species made through biological opinions and mitigation recommendations in the Northwest Power and Conservation Council's Columbia River Basin Fish and Wildlife Program, and they provide benefits both for ESA-listed and non-listed fish and wildlife species.

Since the publication of the strategic plan, BPA and its federal partners issued the final Columbia River System Operations Environmental Impact Statement, which outlines a plan for operating the 14 federal dam and reservoir projects that make up the Columbia River System (CRS). The final EIS includes a preferred alternative that provides the potential for major improvements to ESA-listed salmon and steelhead as well as Kootenai River white sturgeon and bull trout while still achieving the other authorized purposes of the CRS. It builds on recent progress in testing an innovative, collaborative approach to system operations — a flexible spill design — to simultaneously provide clean, reliable, affordable electricity and benefits for salmon and steelhead. Flexible spill was first developed and carried out in FY 2019, following a historic agreement between BPA, the U.S. Army Corps of Engineers, Bureau of Reclamation, the states of Oregon and Washington and the Nez Pierce

Tribe that signaled a shift toward more collaborative approaches to river management. BPA, along with the Corps and Reclamation, signed a joint record of decision completing the EIS process at the end of September.

Breaching the four lower Snake River dams, one of the measures studied in the EIS, is not included in the preferred alternative. While the analysis shows dam breaching could have potential long-term benefits for Snake River fish, it would also have major adverse effects related to navigation, water supply, carbon reduction efforts and power generation and reliability, adversely affecting the communities that depend on the benefits and purposes of these multi-purpose projects.

The release of the Final EIS has not ended the regional debate on the future of the operations and maintenance of the CRS, including the four lower Snake River dams and other issues related to the hydro system. On the contrary, the EIS provides information and analysis to inform future dialogue. BPA expects this process to serve as a springboard for further collaboration and a broader regional discussion about actions to benefit salmon, the region's reliable and affordable clean electricity future, and economic vitality for Columbia Basin tribes and others dependent on the CRS for their livelihoods.

d. Assure that energy efficiency and demand response investments are aligned with the long-term needs of BPA and its customers

The Energy Efficiency organization has embarked on a strategic shift in program offerings to better align its energy efficiency investments with BPA needs. As a result of the 2018 and 2020 Resource Programs,



BPA has identified the energy efficiency that provides the most value to BPA. BPA has shifted its focus to heating, ventilation and air conditioning (HVAC), and weatherization, which provide energy savings preferentially during the winter months when BPA has its greatest energy needs.

BPA has invested in several new programmatic initiatives to help strengthen HVAC and weatherization offerings including programmatic infrastructure investments like the Comfort Ready Home program and Trade Ally Network NW. Regular updates to the Implementation Manual are signaling this transition with increased incentives for HVAC and weatherization measures and reduced incentives for lighting.

e. Modernize the Columbia River Treaty

Over the past two years, the United States and Canada have been actively engaged through multiple rounds of negotiations to modernize the Columbia River Treaty. The United States seeks to negotiate a modernized regime that will ensure the effective management of flood risk; provide reliable and economical power supply; and improve the ecosystem. BPA has been an active member in the U.S. negotiating team led by the Department of State. Up-to-date public information including background material, press releases, town hall information and contact information for inquiries can be found on the Department of State website: www.state.gov/columbia-river-treaty/.

BPA's hydropower-based product remains a dependable, low-cost resource to communities large and small, while also playing an increasingly important role in regional decarbonization efforts.

Areas of focus going forward

Post-2028 Provider of Choice Contracts:

With eight years remaining on BPA's current long-term power sales agreements, BPA has begun taking stock of its competitive position, the value of its products and services, and its vision for the future. The agency is formulating a multi-year plan to secure follow-on power sales agreements. This plan leads with a customer-centric approach, with BPA in the early stages of contract and policy discussions with its power customers. This year, BPA undertook focused customer conversations to solicit customer inputs regarding elements of its current power sales contracts and their supporting policies that are working well for customers, identify elements that require improvement, and gain insight into what customers will value in future power sales agreements. Additionally, based on customer feedback, BPA developed a roster of education materials to ensure customer leadership understands the products and services BPA currently provides.

BPA strives to ensure its future policies and contracts can be a best-fit for evolving customer needs and looks

forward to continuing the conversation in the coming years. By delivering clean, competitively priced power, we are confident BPA can realize its vision of remaining the provider of choice for public power in the post-2028 time period.

Energy Efficiency and Demand Response:

BPA is actively monitoring the development of the Council's 2021 Power Plan and will leverage the information and data out of the Power Plan to produce an updated Conservation Potential Assessment and updated Demand Response Potential Assessment. These assessments will feed directly into the next BPA Resource Program, expected to be updated in 2022. In addition, the Energy Efficiency organization will continue to participate in the cross agency non-wires and Agency Integrated Planning team with the objective of identifying and collaborating with transmission planning in areas that can allow energy efficiency and demand response to provide additional value to BPA outside of energy needs.

#4

Meet transmission customer needs efficiently and responsively

a. Address load service, congestion and new transmission service requests by using flexible, scalable, cost-effective and efficient solutions

BPA has made important advancements in its effort to develop new approaches to meeting its customer needs. This includes improvements to the long-term available transfer capability process, which has allowed for additional transmission capacity being made available on the existing system, resulting in increased sales and revenues.

BPA has completed the Transmission Study Expansion Process cluster study for two consecutive years and begun on the third. This process builds on the former Network Open Season process to analyze transmission service requests based on the latest available information, underlying modeling assumptions, real-time operations and other factors. The annual TSEP cluster study continues to study requests that are not awardable through other processes.

Through this process over the last two years, BPA has offered over 3,500 MW of transmission service requests without the need for builds, and over 4,200 MW were approved with scalable solutions (i.e., series capacitors, line re-sags, remedial action schemes).

BPA also implemented a robust conditional firm process allowing for increased use of the product. Conditional firm transmission service is a form of point-to-point transmission service that can be curtailed under defined conditions

throughout the year. This service can enable customers to use the existing transmission system without waiting on new transmission infrastructure.

To more efficiently provide service to Idaho and Wyoming customers, BPA partnered with Lower Valley Energy in an innovative approach to build the Hooper Springs project. Lower Valley Energy constructed the project, using easements already acquired by BPA. The unique approach took advantage of BPA's strengths as a federal agency while maximizing the local expertise of the utility to overcome some of the land access issues and build the project more cost effectively.

b. Develop and implement policies, pricing and procedures for regional planning that incentivize grid optimization and efficient regional resource development

BPA played a key role in the creation of the new consolidated regional transmission planning organization, NorthernGrid. NorthernGrid's formation will facilitate BPA's efforts to meet transmission customer needs efficiently and responsibly through regional resource development and grid optimization across a broad spectrum of participants and a larger footprint.

BPA is also developing the Commercial Transmission Inventory Map. When complete later this year, it will show customers the likelihood of accessing transmission inventory on monitored network transmission paths. The inventory



map will be paired with Generation Interconnection and Line and Load Interconnection maps to help customers make more informed requests for transmission service.

c. Meet current and future needs of Network Integration Transmission Service customers through clear business practices and streamlined processes

Transmission Services has been implementing NT Dialogue and load and resource forecasting process improvements to improve clarity and transparency of requirements, reduce customer touchpoints and continue aligning with FERC's pro forma tariff NT Service.

Additionally, BPA reinstituted Network Operating Committee meetings in FY 2018. The focus of the NOC meetings over FY 2019–2020 was the joint development of a standard Network Operating Agreement template, which should be implemented by winter 2020.

d. Offer more standardized products and services by better aligning BPA's Open Access Transmission Tariff with pro forma and industry best practices

As a federal power marketing administration, BPA is not subject to the same standards that apply to FERC-jurisdictional public utilities, but we understand the value of adopting FERC's pro forma tariff to the extent possible. In 2018, BPA reached a settlement with transmission customers that laid the foundation for BPA to update its tariff. Since then, BPA and its customers have worked to align BPA's tariff with FERC's pro forma tariff and industry standards. This included memorializing BPA's commitment to provide open access transmis-

sion service and establishing a process and requirements, similar to the process BPA uses for rates, for future tariff modifications. BPA is planning to conduct tariff proceedings in parallel with rate proceedings as well as holding workshops before the proceeding to solicit customer feedback on tariff proposals.

We also worked with the region to develop a new business practice process to establish or modify business practices associated with the tariff. The new business practice process gives more certainty for customers regarding time-lines for opportunities to comment and receive responses from BPA.

TC-22 customer workshops are currently underway with a focus on implementation of EIM and further alignment with FERC's pro forma tariff and industry standards. Some key areas of aligning Bonneville's tariff more closely with pro forma include modifying generator interconnection attachments and credit-worthiness provisions. Some of the key EIM policy and tariff language areas include resource sufficiency, charge code allocation, network usage and participating resources.



Areas of focus going forward:

BPA continues to further align NT Dialogue and agency load and resource forecasting in FY 2020 and FY 2021 to reduce customer touchpoints and provide transparent and efficient processes. These changes will be reflected in an update to the Network Integration business practice in FY 2021.

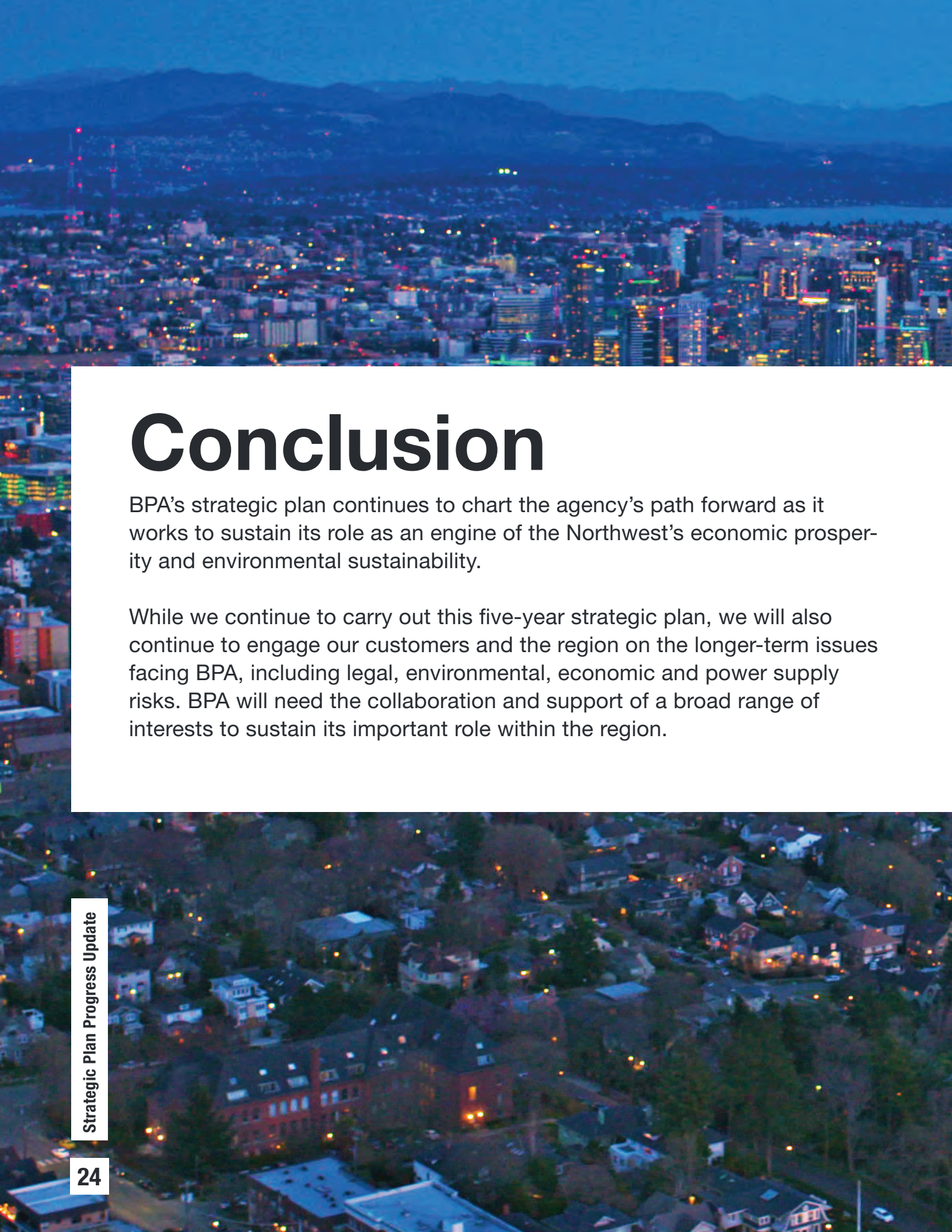
BPA will be scoping full implementation of Network Integration Transmission Service on OASIS (Open Access Same Time Information System) in FY 2021 in an effort to continue aligning NT service with pro forma. Implementation of NITS on OASIS and associated business practice changes are expected to occur beginning in FY 2022.

BPA is also leading an effort to optimize customer touchpoints and improve responsiveness in an effort to improve the customer experience with Transmission Services. This effort is a response to the 2020 customer survey feedback. A few areas of focus are:

- **Interconnection queue responsiveness:** Targets are established and we are monitoring the time it takes to complete studies, design and construction.
- **Customer Portal:** Providing more customer-specific data through BPA's Customer Portal that can be accessed 24/7 as it relates to customer's interconnection projects.
- **Rules of engagement:** Streamlining communication within Transmission and with Power and Corporate organizations to ensure a consistent communication with customers.







Conclusion

BPA's strategic plan continues to chart the agency's path forward as it works to sustain its role as an engine of the Northwest's economic prosperity and environmental sustainability.

While we continue to carry out this five-year strategic plan, we will also continue to engage our customers and the region on the longer-term issues facing BPA, including legal, environmental, economic and power supply risks. BPA will need the collaboration and support of a broad range of interests to sustain its important role within the region.



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BONNEVILLE POWER ADMINISTRATION

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