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BEFORE THE IDAHO PUBLIC UTILITIES COMMISSION

IN THE MATTER OF THE APPLICATION OF AVISTA CORPORATION FOR THE AUTHORITY TO INCREASE ITS RATES AND CHARGES FOR ELECTRIC AND NATURAL GAS SERVICE TO ELECTRIC AND NATURAL GAS CUSTOMERS IN THE STATE OF IDAHO	CASE NO. AVU-E-17-01 CASE NO. AVU-G-17-01 EXHIBIT NO. 1 SCOTT L. MORRIS

FOR AVISTA CORPORATION

(ELECTRIC AND NATURAL GAS)

SUMMARY OF COMPANY WITNESSES

Q. Would you please provide a brief summary of the testimony of the other witnesses representing Avista in this proceeding?

A. Yes. The following additional witnesses are presenting direct testimony on behalf of Avista:

Mr. Mark Thies, Senior Vice President, Chief Financial Officer and Treasurer, will provide a financial overview of the Company and will explain the proposed capital structure, overall rate of return, and Avista's credit ratings. He will also discuss, among other things, the Company's capital expenditures program.

Mr. Adrien McKenzie, as President of Financial Concepts and Applications (FINCAP), Inc., has been retained to present testimony with respect to the Company's cost of common equity. He concludes that:

- In order to reflect the risks and prospects associated with Avista's jurisdictional utility operations, his analyses focused on a proxy group of 18 other utilities with comparable investment risks;
- Because investors' required return on equity is unobservable and no single method should be viewed in isolation, he applied the DCF, ECAPM, CAPM and risk premium methods to estimate a fair ROE for Avista, as well as referencing the expected earnings approach;
- Based on the results of these analyses, he concluded that the cost of equity for the proxy group of utilities is in the 9.5 percent to 10.7 percent range, or 9.6

percent to 10.8 percent after incorporating an adjustment to account for the impact of common equity flotation costs; and,

- As reflected in the testimony of Mark T. Thies, Avista is requesting a fair ROE of 9.9 percent, which falls below the 10.2 percent midpoint of his recommended range. Considering capital market expectations, the exposures faced by Avista, and the economic requirements necessary to maintain financial integrity and support additional capital investment even under adverse circumstances, it is his opinion that 9.9 percent represents a conservative ROE for Avista.

Mr. Scott Kinney, Director of Power Supply, will provide an overview of Avista's resource planning and power supply operations. This includes summaries of the Company's generation resources, the current and future load and resource position, and future resource plans. As part of an overview of the Company's risk management policy, he will provide an update on the Company's hedging practices. He will also address hydroelectric and thermal project upgrades, followed by an update on recent developments regarding hydro relicensing.

Mr. Clint Kalich, Manager of Resource Planning & Power Supply Analyses, will describe the Company's use of the AURORA$_{XMP}$ dispatch model, or "Dispatch Model." He will explain the key assumptions driving the Dispatch Model's market forecast of electricity prices. The discussion includes the variables of natural gas, Western Interconnect loads and resources, and hydroelectric conditions. He will also describe how the model

dispatches Avista's resources and contracts to maximize customer benefit and tracks their values for use in pro forma calculations. Finally, he will present the modeling results provided to Company witness Mr. Johnson for his power supply pro forma adjustment calculations.

Mr. William Johnson, Wholesale Marketing Manager, testimony will identify and explain the proposed normalizing and pro forma adjustments to the 2016 test period power supply revenues and expenses, and describe the proposed level of expense and Load Change Adjustment Rate (LCAR) for Power Cost Adjustment (PCA) purposes, using the pro forma costs proposed by the Company in this filing.

Ms. Jody Morehouse, Director of Gas Supply, will describe Avista's natural gas procurement planning process, provide an overview of the Jackson Prairie natural gas storage facility, and provide an overview of the Company's 2016 Natural Gas Integrated Resource Plan.

Ms. Heather Rosentrater, Vice President of Energy Delivery will provide an overview of the Company's electric and natural gas energy delivery facilities, she will also discuss our electric reliability objectives, types of investments, and system performance, and explain the factors driving our investment in electric distribution infrastructure. Her

testimony will explain why our planned investments in electric distribution are necessary to maintain the current levels of asset health and performance of our system and will discuss the need for each distribution capital project and program by the "Investment Driver" classification used to categorize our infrastructure investment needs. She will describe how our planned compliance with mandatory federal standards for transmission planning is driving a greater demand for new investment, and why our planned investments in our natural gas distribution system are necessary in the time frame they are being carried out.

Finally, she will explain why each capital investment planned for our general plant and fleet areas are necessary to support the efficient delivery of service to our customers, today and into the future.

Mr. Jeff Schlect, Senior Manager, FERC Policy and Transmission Services, describes Avista's transmission revenues and expenses included in the Company's request for rate relief over the Two-Year Rate Plan effective January 1, 2018 and ending December 31, 2019.

Mr. Jim Kensok, Vice President and Chief Information and Security Officer, will provide an overview of IS/IT and describe the costs associated with Avista's information technology

programs and projects. He will also describe the additional expenses required to support a range of new and updated applications and systems necessary to support Company cyber and general security, emergency operations readiness, electric and natural gas facilities and operations support, and customer services.

Ms. Karen Schuh, Senior Regulatory Analyst, will explain how the Company's capital investments in utility plant from December 31, 2016 through December 31, 2019 are incorporated into the proposed revenue requirements in this case.

Ms. Elizabeth Andrews, Senior Manager of Revenue Requirements, will cover accounting and financial data in support of the Company's Two-Year Rate Plan for the period January 1, 2018 through December 31, 2019. She will explain pro formed operating results, including expense and rate base adjustments made to actual operating results and rate base.

Mr. Kevin Christie, Vice President, Customer Solutions, will provide an overview of the Company's Customer Solutions organization, our Customer Service & Support programs, what we are doing to meet our evolving customer expectations, and Avista's products and services initiatives in Idaho.

Ms. Tara Knox, Senior Regulatory Analyst, will cover the Company's electric revenue normalization adjustments and the electric cost of service study performed for this proceeding.

Mr. Joseph Miller, Senior Regulatory Analyst, will cover the Company's natural gas revenue normalization adjustments and cost of service study performed for this proceeding.

Mr. Patrick Ehrbar, Senior Manager of Rates and Tariffs, discusses the spread of the proposed 2018 and 2019 electric and natural gas revenue increases among the Company's electric and natural gas general service schedules. His testimony will also describe the changes to the rates within the Company's electric and natural gas service schedules.

Infrastructure Investment Plan

May 2017

AVISTA®

Exhibit No. 1
Case Nos. AVU-E-17-01/AVU-G-17-01
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I. Executive Summary

Avista Utilities serves approximately 374,000 electric and 336,000 natural gas customers in a 30,000 square mile service territory covering portions of Washington, Idaho and Oregon. In order to provide these services, the Company designs, builds, operates and maintains infrastructure systems that include our thermal and hydroelectric generating resources, electric and natural gas energy delivery systems, information and customer service systems, and general plant including fleet and facilities. This report provides an overview of Avista's Infrastructure Investment Plan (Plan) summarizing the capital investments required for maintaining, improving and expanding this infrastructure[1] to meet our customer service objectives, which requires continuous new investment.[2]

Our process to identify and prioritize capital investment is designed to meet the overall need for investment, in the appropriate time frame, in a manner which best meets the future needs and expectations of our customers, in both the short-term and long-term. The Company's practice has been to constrain the level of capital investment each year, such that not all of the validated and prioritized projects and programs[3] will be funded in a given year. Avista believes that holding capital spending below the level requested accomplishes several important objectives, including:

- ***Promotes Innovation*** - Encourages ways to satisfy the identified investment needs in a manner that may identify potential cost savings, defer implementation, or other creative options or solutions.
- ***Balances Cost and Risk*** – Captures the customer benefits of deferring needed investments by prudently managing the cost consequences and risks associated with such deferrals.
- ***Efficiently Allocates Capital*** – Ensures that the highest-priority needs are adequately funded in the most efficient and effective way.
- ***Reduces Variability*** - Moderates the magnitude of year-to-year variability to avoid excessive rate impacts, and more efficiently optimizes the number and cost of personnel necessary to carry out the capital projects.

Avista currently has chosen to stabilize the level of annual capital spending at $405 million in an effort to accomplish the objectives described above.

Whether the investment touches the customer directly, such as our customer service or metering systems, or indirectly, such as improving the capability and efficiency of our employees and internal work processes, each dollar we invest ultimately supports three primary objectives:

1) to deliver **safe and reliable service** to customers,

[1] In this report "Infrastructure" is defined as the physical, technological, and other systems and resources that enable the Company to provide safe and reliable service to our customers.

[2] The capital investment or infrastructure investment values in this report are based on dollars spent, or to be spent, during the specific year, and are not the same as the dollars transferred to plant in service upon completion of a project or specific unit of investment. The planned level of spending in this report is as of a point in time. Plans can and will change with the passage of time.

[3] "Project" refers to an individual investment made over a specific period of time, such as the Company's advanced metering project. "Programs" represent investments that address systemic needs that are ongoing and cyclical with no recognized endpoint, such as the wood pole management program. For ease of reference, the term "capital project" will be used in this report to represent both capital projects and capital programs.

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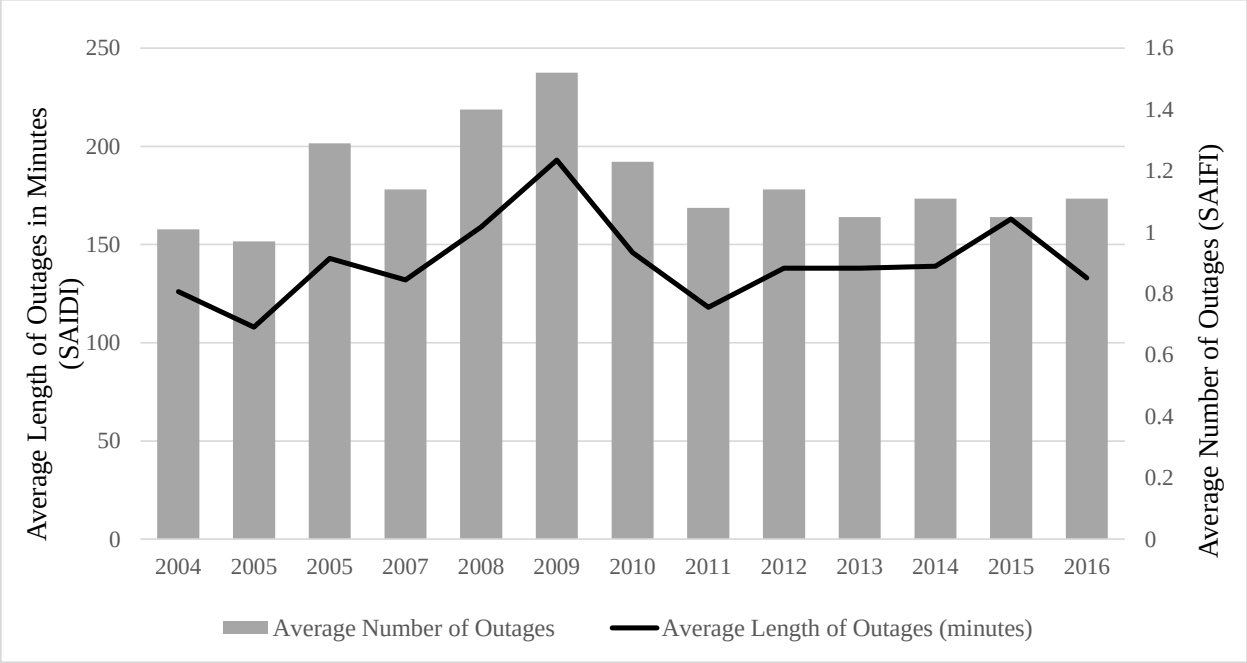
2) achieve **high customer satisfaction**, and
3) at a **reasonable cost to customers**.

1. Safe and Reliable Service – "Reliability" encompasses every aspect of our service and the many infrastructure systems we rely on, along with a priority on the safety of our employees, our customers, and the communities we serve. What do we mean by reliability and how do we measure it? For our electric system, each year we track and report on how well our system has performed as measured by the number of service interruptions or electric outages (SAIFI), and the duration or length of time in minutes of interruptions (SAIDI) that are experienced by our customers. The Company's annual reliability performance for the years 2004 through 2016 is shown in Figure 1 below.

Figure 1 – Avista Electric System Reliability (2004 – 2016)



As shown in Figure 1 above, the Company's annual level of reliability will vary from year-to-year. This fluctuation in outages is common in utility electric systems, and, for Avista, is caused by events such as wind and ice storms, fires, heavy snowfall, animals, vehicles striking our poles and equipment, etc.[4] Our Plan is designed to achieve a reasonable balance of reliable service, which contributes to a high level of customer satisfaction, while at the same time keeping costs reasonable for customers.

If we were to work towards increasing overall system reliability, it would likely require significant continuing investment over multiple years before the benefit is realized, which would lead to higher costs for our customers. The reliability of our system is relatively stable, and we believe is

[4] The measuring protocol for SAIDI and SAIFI excludes outages caused by very large outage events such as the windstorm of November 2015. These major events are referred to a "major event days." Even with these major events excluded, however, we can still experience substantial variability caused by, for example, storms that do not qualify as major events.

at a level which effectively achieves this balance of reliability, customer satisfaction, and at a reasonable cost.

This assessment is evidenced by our high level of customer satisfaction from our customer satisfaction surveys, by the low number of complaints we receive (and the state commissions receive) each year that are related to reliability issues, and by our measured level of reliability based on benchmarking with similar utilities. As an example, in a preliminary study conducted by the Washington Utilities and Transportation Commission (WUTC), Avista's reliability was compared with similar utilities across the country. Avista's results were generally within the range expected given the particulars of our system, including terrain, weather, and customer density, among other factors.[5]

Our planned level of capital investment is designed to preserve the existing level of reliability, and generally not to improve it.

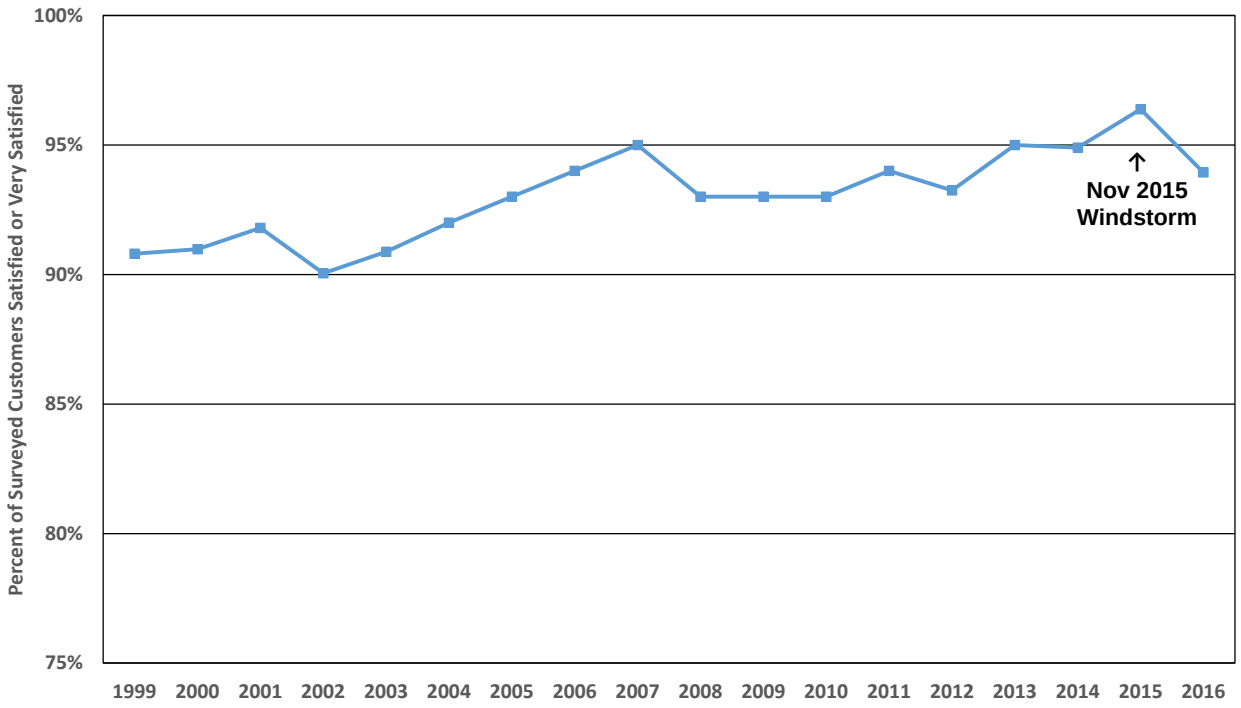
2. High Customer Satisfaction – Each year the Company surveys customers who have had recent contact with our customer service and field service employees to gauge the level of their satisfaction with the quality of our service and their experience doing business with the Company. This survey, known as "Voice of the Customer," tracks many key service metrics such as wait time on the phone and the knowledge, experience and helpfulness of employees. In addition to equipping our employees to provide excellent service, we have also made major re-investments in technology systems, such as our new customer care and billing system, which enables us to deliver service more tailored to the preferences of our individual customers. The Company's performance in meeting our objective to provide high customer satisfaction is measured, in part, by the results of the Voice of the Customer survey.

As shown in Figure 2 below, our most recent 2016 year-end results show an overall customer satisfaction rating of 94% for both electric and natural gas service across all our jurisdictions. This 94% rating reflects customers that are either "satisfied" or "very satisfied" with the service they receive from Avista. The drop in customer satisfaction from 96% in 2015 to 94% in 2016 is due, we believe in large part, to the aftermath of the major windstorm in November 2015, which resulted in approximately 48% of our customers being without power. Because of the destructive nature of the storm, it took 10 days to restore power to all of our customers.

We believe our stable-to-improving performance in achieving high levels of customer satisfaction reflects our commitment to service and a reasonable level of investment in infrastructure and technology to deliver quality customer care.

[5] "Reliability Targets for Washington's Three Investor-Owned Utilities". Power System Engineering Inc., March 7, 2017.

Figure 2 – Avista Total Customer Satisfaction Ratings



In addition, in 2015, working closely with WUTC Staff and others, Avista implemented a service quality measures program for tracking and reporting our performance in meeting a range of customer service benchmarks. The annual results are reported to our customers and to the WUTC each year. For 2016, Avista reported the following results:

- **Service Quality Performance** – Avista exceeded each of the six performance targets used to measure the quality of our customer service, including contact center and field services satisfaction, number of Commission complaints, and meeting call answer and field response time goals.
- **Customer Guarantees** – Avista met 68,630 successful "Customer Service Guarantees" (which includes keeping our appointments, restoration of routine outages within 24 hours, and customer request deadlines, etc.) for an overall success rate of 99.5%.

The 2016 Service Quality Measures Report Card is attached as Appendix 1. These results further demonstrate the Company's success in delivering quality services to our customers that meet our objectives of providing safe, reliable service, with a high level of customer satisfaction.

3. Reasonable Cost to Customers – The third primary objective related to our Infrastructure Investment Plan is to be mindful of the overall cost impacts to our customers over time. In this report we explain the process we use to identify and prioritize the investments in our utility systems. In recent years, Avista has chosen to not fund all of the capital investment projects requested by the various departments in the Company, driven in large part by the Company's desire to mitigate the retail rate impacts to customers. The decision to delay funding on certain projects is made only in cases where the Company believes the amount of risk associated with the delay is reasonable and prudent. As new, unexpected, high-priority capital projects arise, the capital

projects for the year must be reprioritized to limit the total spend for the year to fall within the constrained overall capital spending level. In other instances, some scheduled capital projects will encounter unexpected delays due to such things as permitting issues, delays in receipt of materials and equipment, etc. A delay in one project may allow another project to be accelerated in time as part of managing the availability of our workforce and to continue to make progress on projects next in the "queue" that need to be done. The continuing progress on projects in the queue is very important to avoid the creation of a large "bow-wave" of investment that needs to be done in a relatively short period of time. This reprioritization occurs within the Capital Planning Group (CPG),[6] which is charged with ensuring that the total capital spend for the year stays within the constrained spending limit established by the Company. The dollar amount of capital projects requested by departments with the amounts approved by the Company is provided in Table 1 below. The dollar amounts not approved, for projects the Company chose to delay, are also shown:

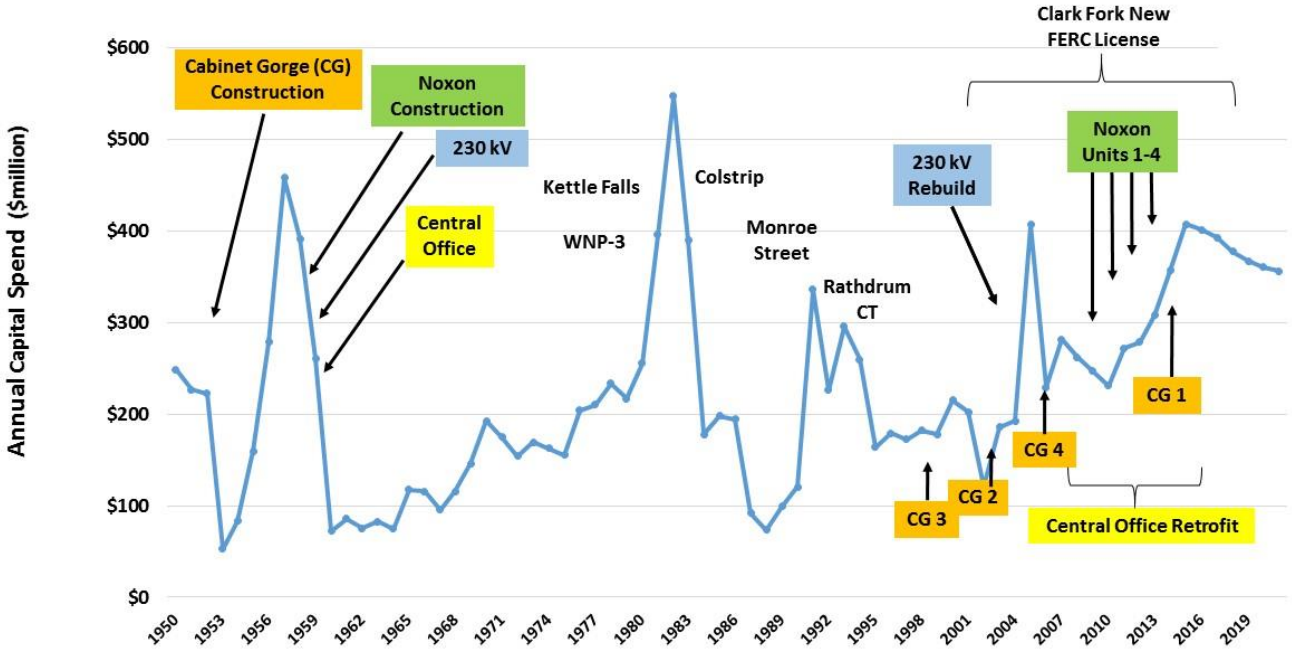
Table 1 – Capital Project Requests/Approvals

Year	Requested	Approved	Delayed
2012	$268,974,720	$250,000,000	$18,974,720
2013	$319,552,833	$250,000,000	$69,552,833
2014	$386,256,808	$331,000,000	$55,256,808
2015	$403,864,170	$355,000,000	$48,864,170
2016	$450,595,906	$375,000,000	$75,595,906
2017	$461,111,714	$405,000,000	$56,111,714

The infrastructure investment we face today arises, in part, from the re-investment that is necessary to rebuild or replace facilities that were installed many years ago. The line graph in Figure 3 below shows Avista's capital spending on an annual basis from 1950 to 2016, along with investment plans for 2017 – 2021. The dollars have been adjusted for inflation to reflect equivalent dollars in 2016 for comparison purposes, e.g., the dollars spent in 1983 have been adjusted (increased) to reflect what it would have cost to complete the same projects in 2016. The graph shows our Cabinet Gorge and Noxon Rapids major hydroelectric projects, originally built in the 1950s, being refurbished 40 to 50 years later; as well as our 230kV transmission system receiving major upgrades 40 to 50 years later. Our Central Office building was completed in 1958, and we recently remodeled and replaced the original HVAC system 50 years later, in order to continue to use these same facilities for the foreseeable future.

[6] The CPG is a group of Avista employee directors that represent all capital intensive areas of the Company. The CPG meets to review the submitted Business Cases and prioritize funding to limit the capital spend to the level set by senior management. After approval from senior management, the annual capital budget is sent to the Finance Committee of the Board of Directors to approve the capital budget amount. The CPG meets monthly to review the status of the capital projects and programs, and approves or declines new business cases as well as monitors the overall capital budget.

Figure 3 – Avista Annual Capital Spend 1950 – 2021 (2016 Dollars)

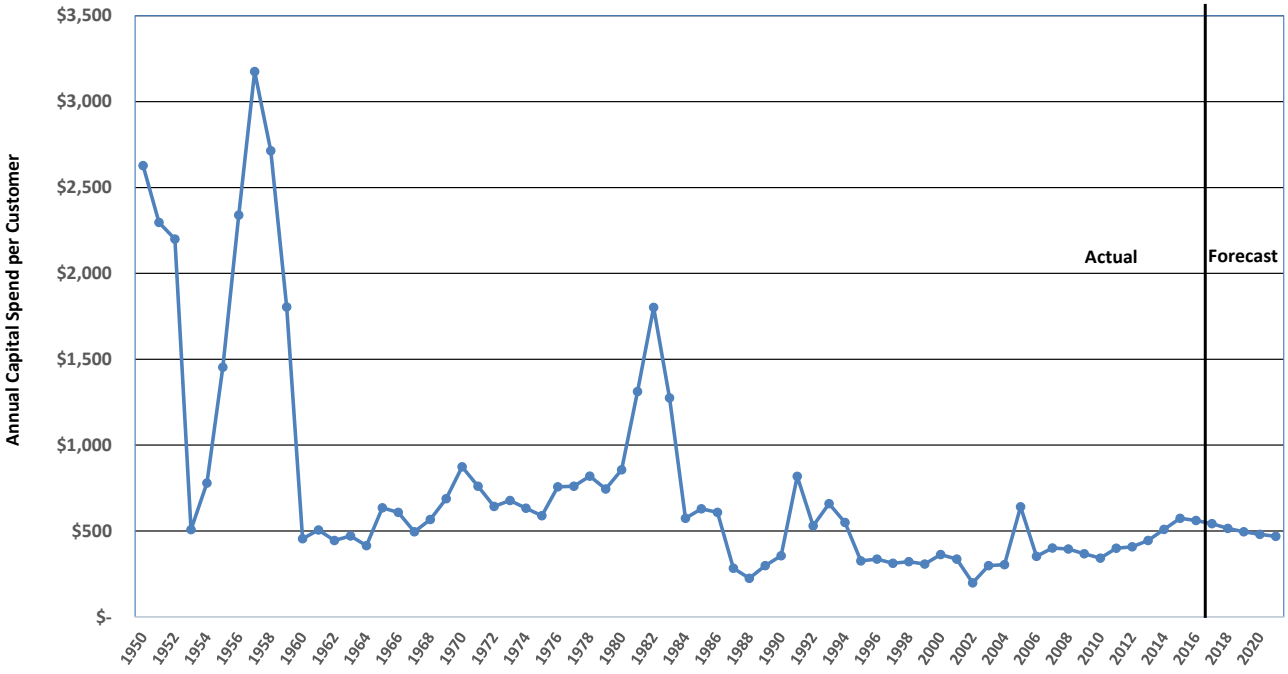


Other more recent major investments are identified below:

- Spokane River Projects Redevelopment – Nine Mile, Little Falls, Post Falls (2014 – Continuing)
- Aldyl A Pipe Replacement (2011 – Continuing)
- Customer Service System (2011 – 2015)

It is informative to view the line graph in Figure 3 above on a per-customer basis. The graph in Figure 4 below represents Avista's annual capital spending, in 2016 dollars (from Figure 3 above), divided by the number of customers for each respective year. Avista's annual capital spending has grown in recent years, but so has the number of customers being served by the Company. The graph below illustrates that our current level of capital spending on a per-customer basis is in line with the per-customer capital spending for approximately the last 30-years. That is, if a trend-line for the last 30-years were to be calculated and over-laid on the graph, it would show that capital spending on a per-customer basis has been nearly flat for the last 30-years. In addition, for the period 2017-2021, the graph shows the planned capital spending on a per-customer basis declining to the future.

Figure 4 – Avista Annual Capital Spend per Customer - 1950-2016 Actual, 2017-2021 Planned (2016 Dollars)

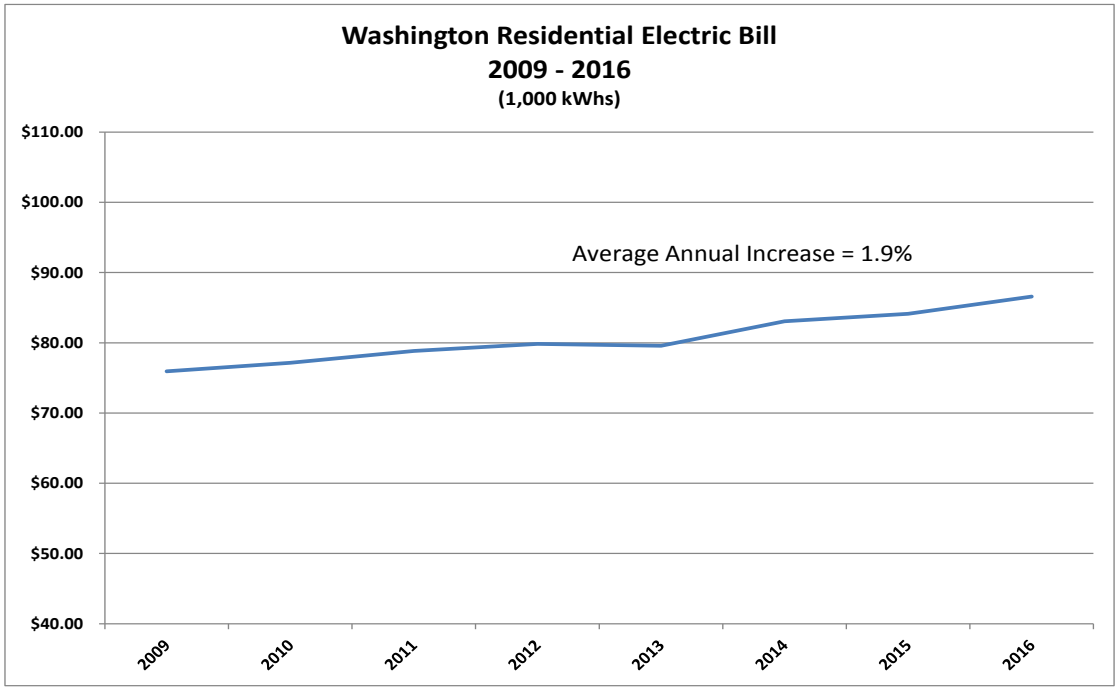


With regard to the overall costs to customers, the line graph in Figure 5 below shows the change in the monthly bill, from 2009 to 2016, for a Washington residential electric customer using an average of 1,000 kilowatt-hours per month. The graph shows that the average increase over time has been 1.9% per year. Although this average increase is a little higher than the level of inflation during the same period, the increase to customers during this period is less than it otherwise would have been by the Company choosing to fund less than the dollar amounts of capital projects requested by the various departments of the Company. Examples of deferred and underfunded projects include the Company's Hatwai-Lolo #2 230kV transmission line reconductor and rebuild[7], and rebuilding electric distribution feeders at the end of their useful life.[8]

[7] This project, which is required to comply with federal transmission planning standards, has been deferred in order to balance the overall demand for investment across the Company. Avista's engineers are evaluating other possible short-term solutions for complying with the planning standards until this project can be completed.

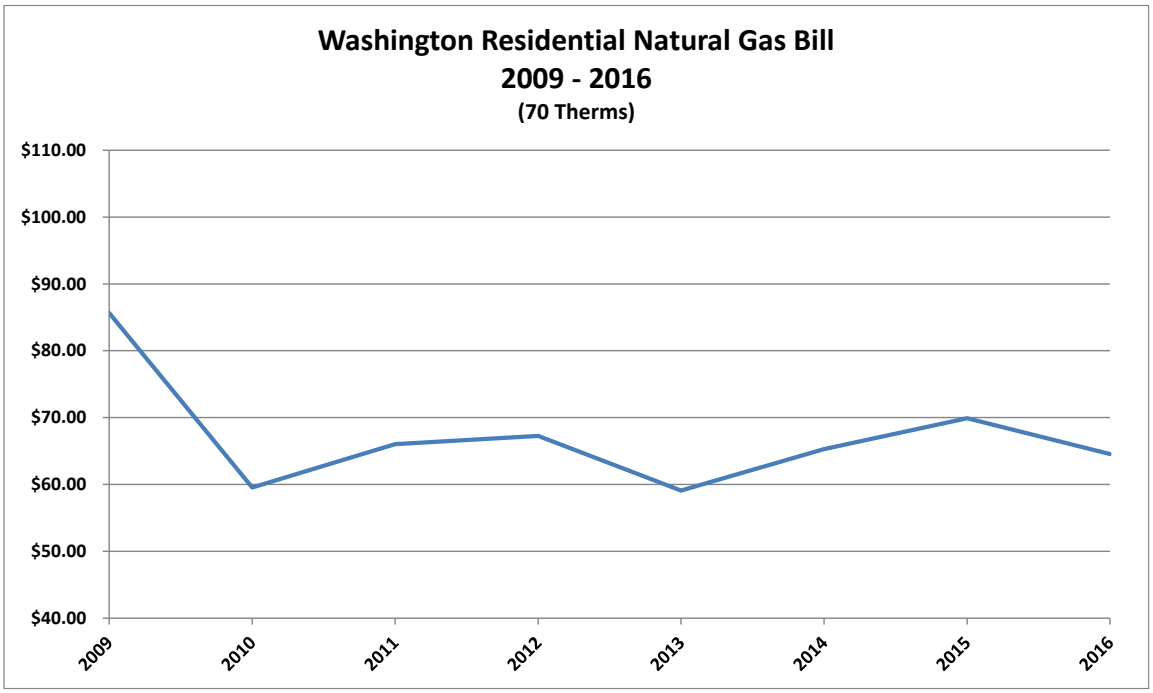
[8] The Company's grid modernization program is optimized on a 60-year cycle, however, it has not been funded at a level to achieve that cycle time, in order to accommodate other priority investment needs in Avista's electric distribution system. The level of funding for this project that the Company has included in the 2017 – 2021 timeframe moves the cycle to 84 years, still longer than the optimized cycle.

Figure 5 – Washington Residential Electric Bill (2009-2016)



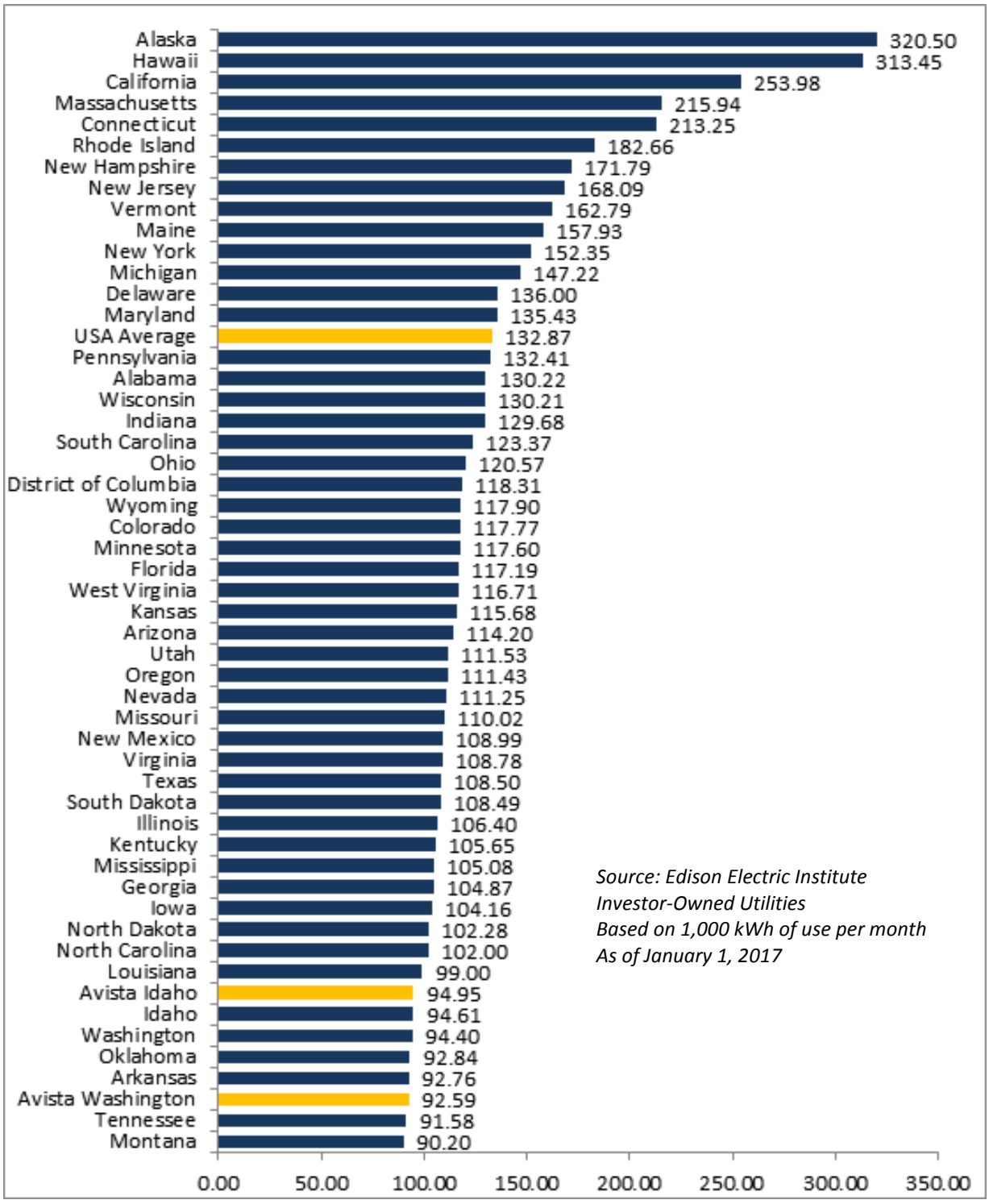
With regard to natural gas, the line graph in Figure 6 below shows the change in the monthly bill, from 2009 to 2016, for a Washington residential natural gas customer using an average of 70 therms per month. The graph shows that customer bills have dropped from approximately $85 per month in 2009, to approximately $65 per month in 2016. The graph shows that bills have decreased significantly for this time period, even as Avista has continued to make the necessary investments to maintain its delivery system and install new technology. The decrease in customers' natural gas bills is driven primarily by the decline in natural gas commodity costs, as well as a decrease in interest costs during the period.

Figure 6 – Washington Residential Natural Gas Bill (2009-2016)



With regard to Avista's retail rates compared to other investor-owned utilities, Edison Electric Institute periodically prepares a comparison of residential electric bills for investor-owned utilities across the country. Figure 7 below provides a comparison of an Avista residential customer's monthly bill in Washington and Idaho with utility bills in other states. The chart shows that Avista's residential customers' rates are among the lowest in the Country for investor-owned utilities.

Figure 7 – Average Residential Monthly Electric Bill



Our relatively low retail rates are due in large part to a history of our Company aggressively pursuing the acquisition and preservation of a diversified portfolio of low cost resources for the benefit of our customers. They are also a result of Avista's efforts to control its capital investment costs and utility operating costs, in order to keep retail rates as low as reasonably possible.

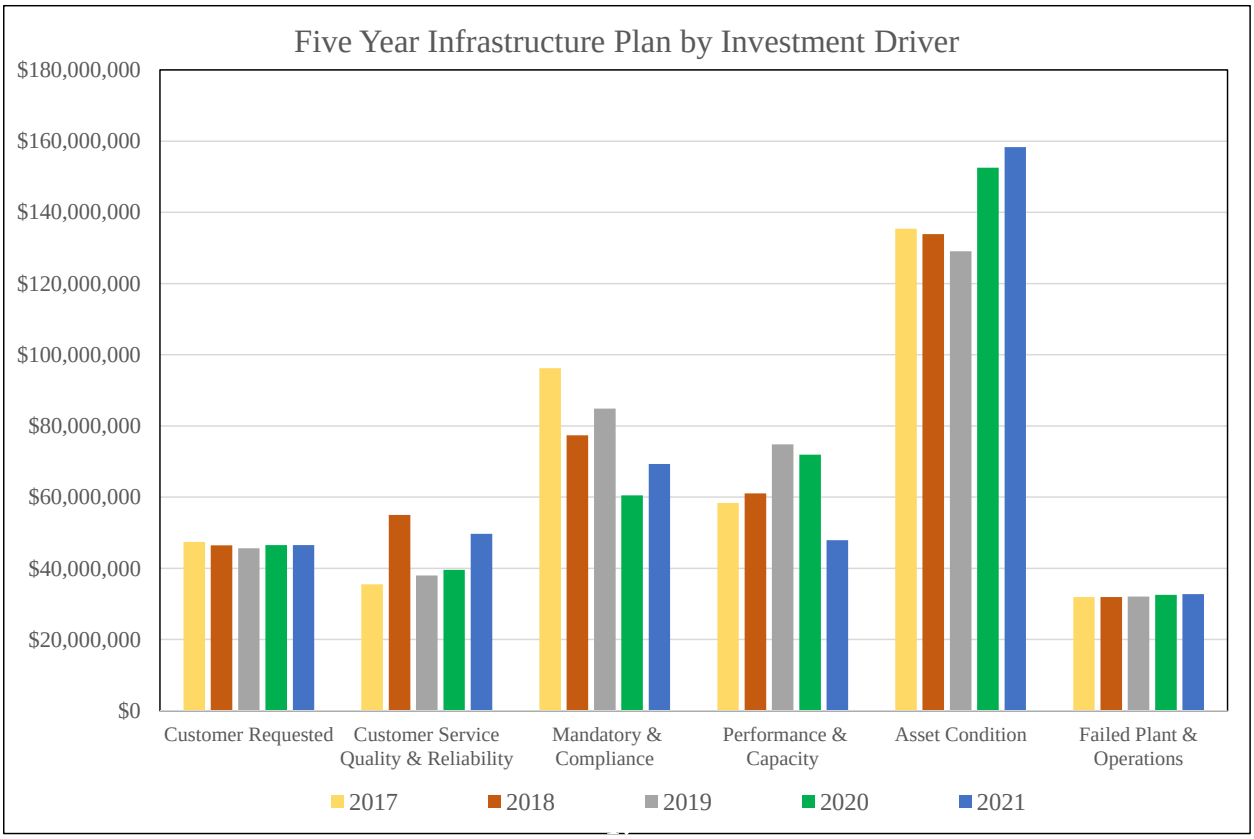
Capital Investment Drivers – Avista's capital investments originate from the following six major "investment drivers":

1. *Respond to customer requests for new service or service enhancements;*
2. *Meet our customers' expectations for quality and reliability of service;*
3. *Meet regulatory and other mandatory obligations;*
4. *Address system performance and capacity issues;*
5. *Replace infrastructure at the end of its useful life based on asset condition, and;*
6. *Replace equipment that is damaged or fails, and support field operations.*

Section III of this report provides an explanation of each of these drivers, as well as examples of specific capital projects under these drivers.

The breakdown of planned investments for each driver for 2017-2021 is shown in Figure 8 below.

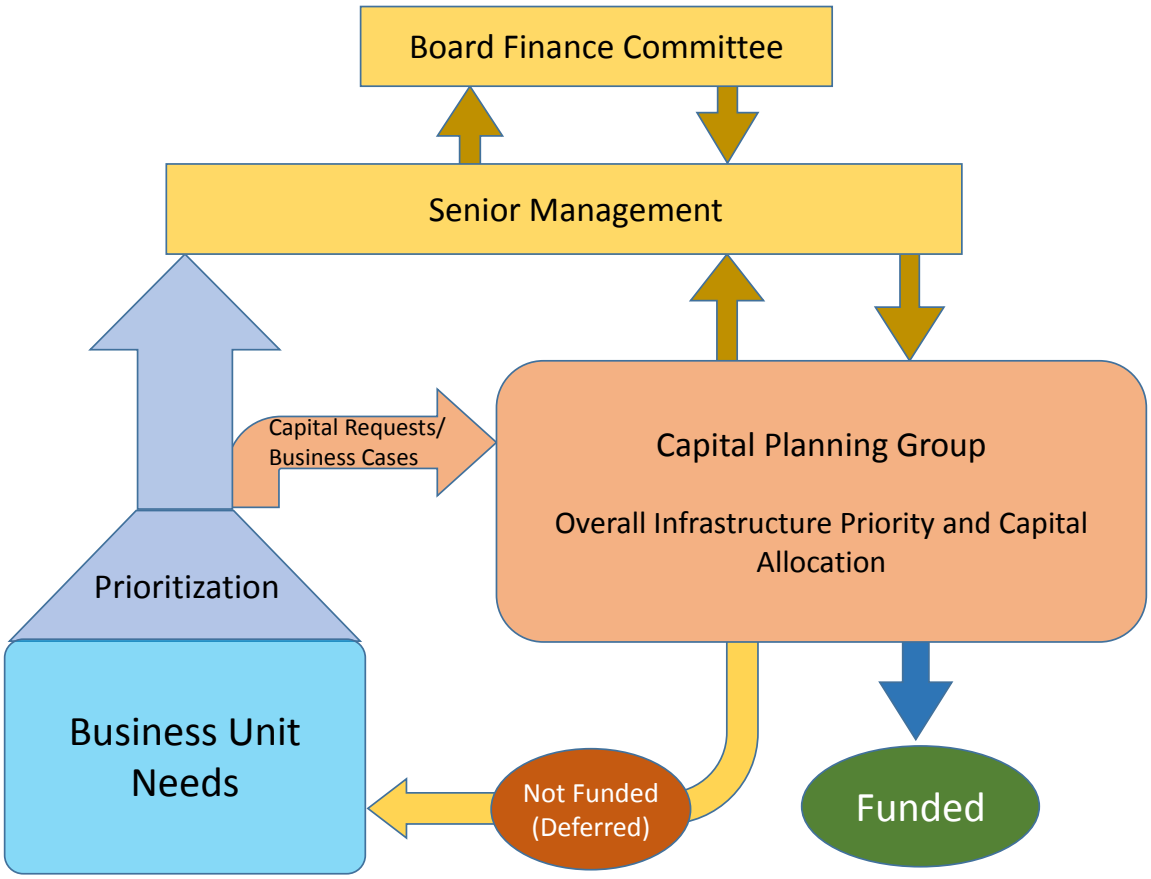
Figure 8 – Planned Investments by Capital Investment Driver (2017 – 2021)



Identification and Prioritization Process – The process under which Avista's planned capital expenditures are identified and prioritized is illustrated in Figure 9 below. The capital projects are identified in the lower-left portion of the diagram labeled "Business Unit Needs." The capital projects are then prioritized within each department. This prioritization occurs with the knowledge of the continuing constraint on the capital spend level for the Company, while at the same time the leadership of each department informs Senior Management of both the near-term and longer-term

needs that are being delayed.[9] For the prioritized projects, Business Cases[10] are developed for each of the Capital Requests that go to Avista's Capital Planning Group. The CPG prioritizes the Capital Requests across departments, such that the overall planned capital spend stays within the constrained spend level established by Senior Management. The highest priority Capital Requests are Funded, and a portion of the Capital Requests are Not Funded (Deferred), as shown on the diagram. The Board Finance Committee reviews and approves the first year of the five-year capital investment plan. Under this Identification and Prioritization Process, the capital projects are screened and prioritized twice; once within the departments, and then a second time across departments within the CPG. This Identification and Prioritization Process is explained in more detail in Section II of this report.

Figure 9: Identification and Prioritization Process



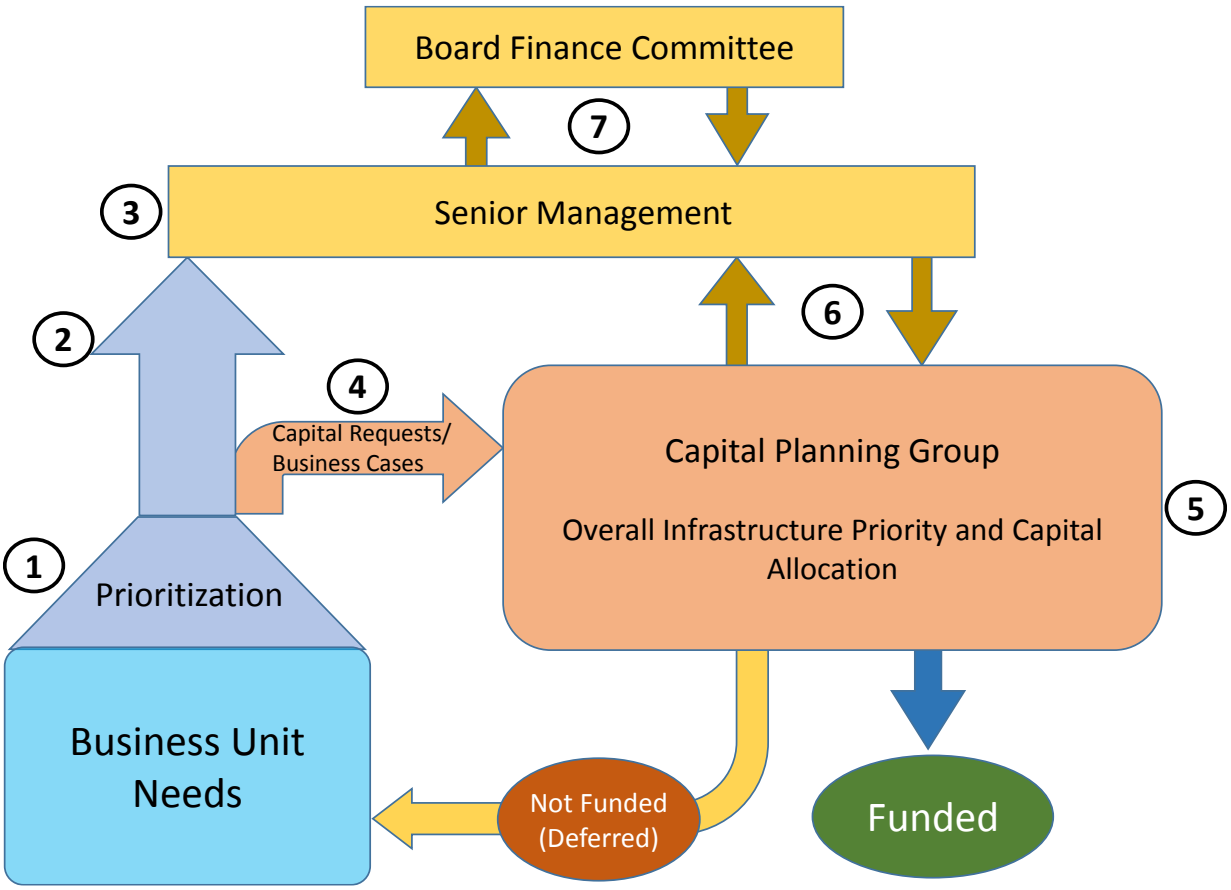
[9] Footnotes 7 and 8 provide examples of infrastructure projects that have been deferred or partially funded.

[10] A business case is a summary document that defines the business problem addressed by a project or program, along with a proposal and recommended solution. The business case explains why the work is necessary, and the risks associated with not making the investment, as well as the alternatives considered, the selected alternative and the timeline associated with the project.

II. Capital Investment Prioritization Process

The Company's processes for determining the need for capital investment, establishing the annual funding limits, and the allocation of capital among the highest priority projects is mapped in Figure 10 below. A narrative explaining generally how the identification and prioritization process works follows the diagram.

Figure 10: Identification and Prioritization Process



1. Identifying, Vetting, and Prioritizing Business Unit Needs

The foundation of the Company's infrastructure planning and capital budgeting process is the development of specific projects and programs by our employee subject matter experts based on identified needs required to keep our systems operating in a safe, reliable, satisfactory, compliant, and cost effective manner. Projects proposed for funding are evaluated within each respective Business Unit[11] that is responsible for managing the assets, and at that point the determination is made about whether or not to recommend a project for implementation (and funding) in the five-year planning horizon. The need and timing of the project and the risk associated with not doing the project in the near-term is balanced against the constraint on the overall capital spending level imposed by senior management. This evaluation requires analyses, studies, policy and legal

[11] Business unit examples include the transmission engineering group, electric operations, and the information technology group.

interpretations, and other materials that help document the necessity of the project, and factors influencing the immediacy of the timing for implementation. Projects sponsored by each Business Unit are prioritized by that group and a capital project Business Case summary is completed for each project that is recommended for funding.

These "Needs" reflect the capital projects and programs that originate from the six Capital Investment Drivers explained in Section III of this report. The Business Cases for each of the individual capital projects and programs within the six Capital Investment Drivers address what the project is designed to accomplish, why it needs to be done in the time frame proposed, as well as what the risks and consequences are of not completing the project.

2. Communicating the Overall Need for Investment

The demand for new investment determined in each Business Unit is shared in various forums with the Company's senior management to ensure that they understand factors driving the current and expected need for investment, the time frame for the projects, and risks and consequences of not completing the projects.

3. Establishing the Level of Annual Investments

Avista's senior management assesses the overall demand for capital investment each year, and considering and balancing the range of planning principles shown in the diagram below, determine the level of capital spending to be presented to the Finance Committee of the Board of Directors.[12]

The Company's practice has been to constrain the capital made available for investment each year, such that not all of the prioritized projects and programs are funded as requested. Avista believes that holding capital spending below the level requested accomplishes several important objectives, including:

- ***Promotes Innovation*** - Encourages ways to satisfy the identified investment needs in a manner that may identify potential cost savings, defer implementation, or other creative options or solutions.
- ***Balances Cost and Risk*** – Captures customer benefits of deferring needed investments by prudently managing the cost consequences and risks associated with such deferrals.
- ***Efficiently Allocates Capital*** – Ensures that the highest-priority needs are adequately funded in the most efficient and effective way.
- ***Reduces Variability*** - Moderates the magnitude of year-to-year variability to avoid rate impacts, and more efficiently optimizes the number and cost of personnel necessary to carry out the capital projects.

[12] The Finance Committee is presented with a five-year plan, but specifically approves only the first year of the plan.

Avista currently has chosen to stabilize the level of annual capital spending at $405 million in an effort to accomplish the objectives described above.

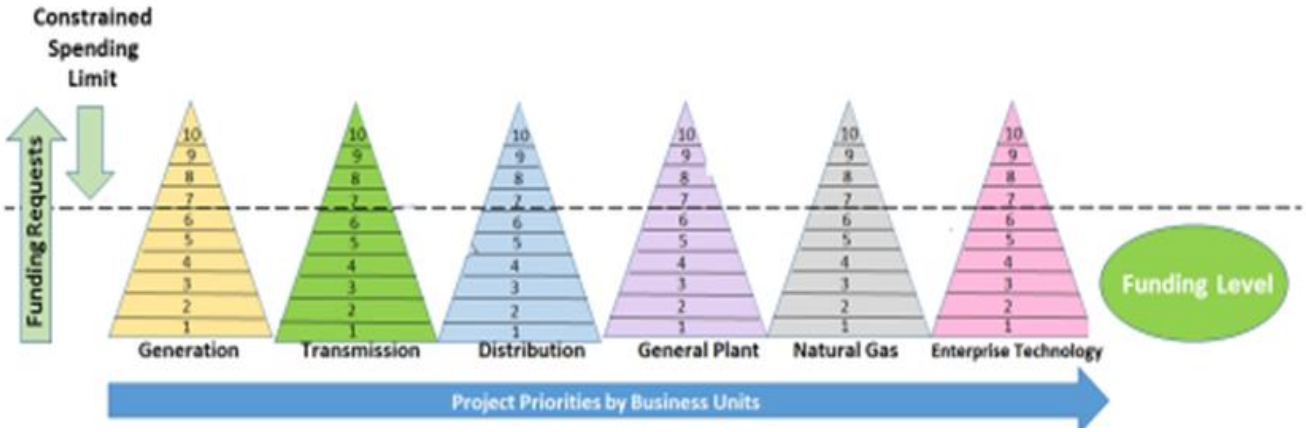
4. Narrowing the Capital Requests

In identifying and prioritizing the projects and programs to be recommended for funding (as described above) the directors or managers of each Business Unit pare down the number of projects or the funding level for programs based on the awareness that there is a constraint on the overall capital spending level. In this process they decide what specific investments can be deferred until a later point in time while insuring that this decision does not result in excessive additional risk. While this practice promotes an efficient and orderly allocation of capital, it results in an underrepresentation of the actual demand for capital facing the Company. Although the capital projects and programs that are considered by the Capital Planning Group may appear to represent the totality of the demand for new investment, in actuality it represents the constrained or limited portion of the investment need that is known to the Company.

5. Prioritization and Capital Allocation Across Business Units

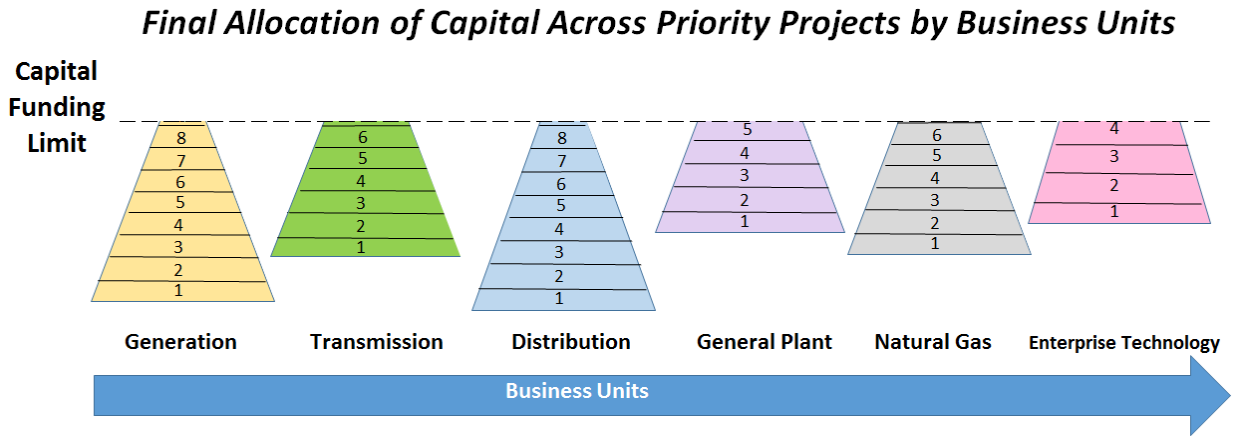
Avista has a standing committee, referred to as the Capital Planning Group, which has the responsibility for determining what capital investments proposed for funding in the current period will be deferred in order to reduce the planned capital spending to the constrained level established by Senior Management. Each director member of the group is intimately familiar with the infrastructure projects vetted, prioritized and approved in their Business Unit, and is generally familiar with projects and programs sponsored by their fellow directors.

In the process of deciding which investments will be deferred, the Capital Planning Group convenes to discuss and agree on how to prioritize projects in the manner that most effectively allocates limited investment capital among identified Company-wide needs. In the conceptual diagram below, the pyramid shapes represent the prioritized projects sponsored for funding by each Business Unit in the Company. The numbered layers in each pyramid represent individual projects and programs organized from the highest (1) to the lowest (10) priority. In this depiction, the pyramids represent the aggregate capital funding level requested by the Business Units, and the dashed line represents the capital constraint that requires a portion of the prioritized projects to be "unfunded."



The Capital Planning Group evaluates and discusses the consequences of not funding the projects above and below the dashed line. Among a range of factors, the group considers the immediacy of the need for investment, the financial and other impacts of deferring projects, the efficient utilization of crews, safety, reliability, and partial funding versus an "all or nothing" approach.

Based on this iterative and comparative assessment of the benefits and avoided consequences associated with funding or deferring projects or programs, the team adjusts the list of projects to be funded, as well as the amounts to be funded, to arrive at the best-balanced allocation of capital among priority needs across the business, as depicted in the diagram below.



In this "final" allocation, the projects with the highest Company-wide priority are recommended for funding. Some program requests are scaled back, and some programs and projects are deferred for later implementation. In the above example, the final allocation deferred two projects each in generation and distribution, while the number deferred in the other areas was substantially higher. This final allocation recommended by the Capital Planning Group reflects the need to fund the highest priority investments first, on a Company-wide basis, while taking care to ensure that the investments deferred will not result in excessive cost or risk.

6. Approval by Senior Management

Once funding is allocated to priority projects for the coming five-year period, the group presents the plan to Avista's senior management who provide feedback and ultimately approve the infrastructure plan.

7. Approval of the Capital Investment Plan

Avista's senior management presents the proposed infrastructure investment plan and budget to the Finance Committee of the Board of Directors, which after discussion and the opportunity for amendment, establishes the funding level available for final allocation by the Company's Capital Planning Group. The status of the planned versus actual investment spending is reviewed with the Finance Committee at least twice each year.

Ongoing Review and Prioritization

In addition to its annual planning meetings, the Capital Planning Group meets monthly to review ongoing infrastructure planning issues, including:

1. New projects proposed for funding;
2. Unanticipated changes in planned spending in projects or programs during the year;
3. Determining which project(s) that were deferred for the current year will be approved for funding in the event a previously approved project is delayed;
4. Revisions to the prior allocation of capital among projects and programs arising from an unanticipated urgent need for investment; and
5. Requirements to reduce the overall level of investment that was previously approved.

As noted above in item three, delay of an approved project can arise for a variety of reasons, including changes in the availability of contract resources or materials, alterations to plans negotiated with other parties such as hydro license investment requirements, unanticipated weather, etc.

III. Capital Projects and Programs by Investment Driver

Avista's capital investments originate from the following six major "investment drivers":

1. *Respond to customer requests for new service or service enhancements;*
2. *Meet our customers' expectations for quality and reliability of service;*
3. *Meet regulatory and other mandatory obligations;*
4. *Address system performance and capacity issues;*
5. *Replace infrastructure at the end of its useful life based on asset condition, and;*
6. *Replace equipment that is damaged or fails, and support field operations.*

An explanation of each of these drivers, as well as examples of specific capital projects and programs under these drivers is provided below.

A. Customer Requested Investment

This classification of infrastructure investments is defined as: ***"customer requests for new service connections, line extensions, transmission interconnections, or system reinforcements to serve a customer."*** The related capital construction activities are typically limited to the electric and natural gas distribution systems but may extend to substations and dedicated high voltage transmission lines. The annual level of these investments is driven almost exclusively by the level of customer demand we experience each year. Variation in the number of new connects is largely dependent on local economic conditions in both the housing and business sectors. Population growth rates in Avista's service territory range between one and three percent, with exceptions such as Coeur d'Alene and Post Falls, Idaho, and Liberty Lake and Pullman, Washington, where commercial business development is driving somewhat greater local population growth. Avista uses multiple factors including population growth, overall economic activity and building permit applications as the basis to forecast the number of customer connections expected in each year of the program.

Electric Service Requests - Avista operates over 19,000 miles of distribution lines, including both overhead wire and underground cable systems. Though the bulk of electric loads are concentrated in urban areas including Spokane, Coeur d'Alene, Moscow, Pullman, Lewiston, and Clarkston, Avista's service territory includes many rural towns, mining districts, as well as agricultural and forest product areas. The expected investments by installed asset group are shown in Table 2. In addition to new services the Company is planning to add capacity to its Hallett and White substation to meet the need for increased capacity for an existing large commercial customer and a wholesale network transmission customer.

Table 2 – Avista Electric Customer Connection Request Forecast

Electric	2017	2018	2019	2020	2021
Line Extension	$14,775,000	$14,266,927	$14,795,440	$15,116,635	$15,116,635
Meters	$550,000	$550,000	$500,000	$500,000	$500,000
Transformers	$5,763,080	$5,877,014	$4,792,226	$4,858,742	$4,926,589
Street Lights	$900,000	$900,001	$900,000	$900,000	$900,000
Area Lights	$650,000	$675,000	$700,000	$700,000	$700,000
Network Transformers & Protectors	$960,000	$980,000	$980,000	$980,000	$980,000
Total	**$23,598,080**	**$23,248,942**	**$22,667,666**	**$23,055,377**	**$23,123,224**

Natural Gas Service Requests - Avista operates over 7,700 miles of natural gas pipelines across our three state jurisdictions. Requests for service include a mixture of new construction residential and commercial projects in addition to customers converting from other heat sources such as electric, oil, propane, and wood.[13] The investment required to connect new customers can vary significantly with the types of load and location served. Table 3 includes the expected investment by installed asset groups.

Table 3 – Avista Natural Gas Customer Connection Request Forecast

Natural Gas	2017	2018	2019	2020	2021
Extension	$19,272,801	$18,574,437	$19,174,489	$19,574,521	$19,472,818
Meters	$2,027,380	$2,051,317	$2,114,092	$2,172,453	$2,217,720
ERTs	$1,112,771	$1,131,677	$1,166,113	$1,199,109	$1,227,269
Regulators	$482,795	$481,515	$486,490	$509,220	$515,989
Total	**$22,895,747**	**$22,238,946**	**$22,941,184**	**$23,455,303**	**$23,433,796**

Table 4 below provides a summary of the capital investment for the Customer Requested Investment driver:

Table 4 – Customer Requested Investment Summary

	2017	2018	2019	2020	2021
Electric Services	$23,598,080	$23,248,942	$22,667,666	$23,055,377	$23,123,224
Hallett and White - Add Capacity	$949,953	$959,094	$0	$0	$0
Natural Gas Services	$22,895,747	$22,238,946	$22,941,184	$23,455,303	$23,433,796
Total	**$47,443,780**	**$46,446,982**	**$45,608,850**	**$46,510,680**	**$46,557,020**

The total dollar amounts in Table 4 above represent the total of the investment associated with the individual Business Cases within this Investment Driver category. The Business Cases explain why the projects are necessary in the time frame proposed, and address the costs, risks and/or consequences if the projects are not completed. There is also documentation associated with each Business Case supporting the need and timing of the investment.

[13] In addition to the economic indicators noted above, Avista also includes the trend in electric to natural gas conversions in its forecast of natural gas service connects.

B. Customer Service Quality and Reliability Investments

Customer Service Quality and Reliability programs and projects are those ***"investments required to maintain or improve the quality of services we currently provide our customers, to introduce new types of services and options based on an analysis of customer needs and expectations, and to ensure we achieve our customer service quality requirements, and our electric system reliability objectives."***

New technology systems are driving constant change in our customers' service expectations and our ability to meet them. The quality and nature of our services must evolve quickly to keep pace with this change. An example of this technology was the advent of Geographical Information Systems (GIS) which enabled the Company to create a state-of-the-art outage management system, launched in 1999. This system has provided us much greater visibility of outage events for more efficient and rapid restoration, and it allows us to provide customers with valued and timely information important to them during an outage. In response to changing technology and customer expectations, we recently launched our new Customer Outage Information Center which provides real time updates and details to customers about service outages in their neighborhood, accessed from a computer or a smart phone application. This service, which was launched just prior to the November 2015 windstorm, provided customers with more information regarding outage locations, estimated restoration times, and crew locations as compared to the more simplified outage map the Company previously hosted on its website.

Customers expect to interact and conduct an increasing variety of business transactions through their channel of preference, particularly online.[14] Throughout the world, smartphone use continues to rise, and advances in technology have created an expectation that information is easy to find, payments are easy to make, and communications are proactive, timely, and personalized. In an effort to keep pace with customer demands and quickly-evolving technologies, Avista will continue to provide customers with tools and resources to effectively manage their energy use, quickly access and understand their billing information, and to request needed services from the Company. We are also focused on meeting our customers' expectations and maintaining high satisfaction by providing them access to new products and services such as online requests for service and tracking, appointment scheduling, and mobile energy management in their home or business.

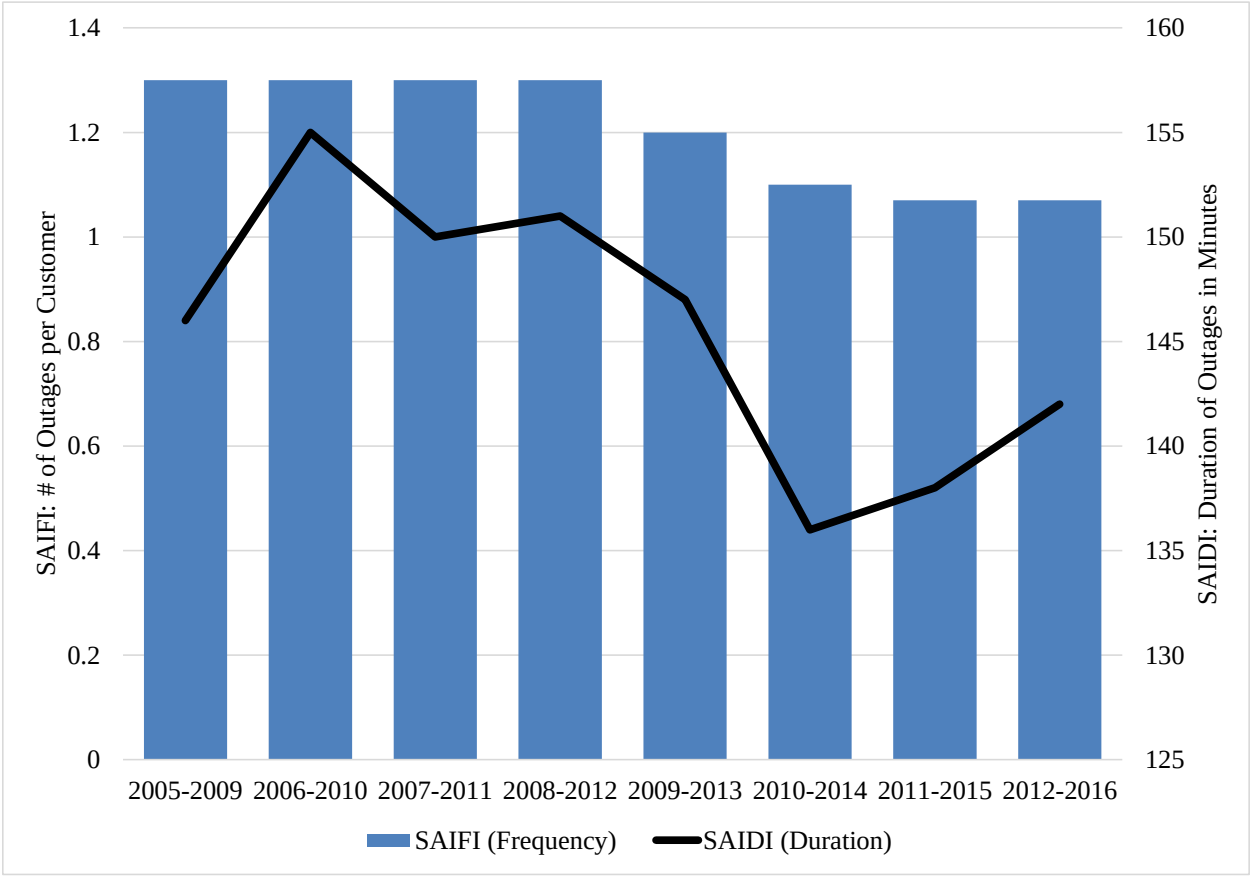
As noted earlier, in 2015, Avista implemented a Service Quality Measures program for tracking and reporting our performance in meeting a range of customer service benchmarks and service guarantees, as well as reporting on the annual reliability of our electric system. The Company reports to its customers and to the Commission each year on its prior-year performance in meeting these customer service and reporting requirements as part of its annual electric system reliability report. The results for 2016 are attached in Appendix 1 in Avista's 2016 Service Quality Report Card.

Avista, like all utilities, has a constant focus on maintaining a high degree of reliability in the continuity of our service. Dependability is becoming an increasingly important aspect of service quality as our society becomes more electrically connected and reliant upon electronic

[14] "Channels" include person-to-person through our customer service contact center, our automated telephone system, e-mail, text, chat, postal service, and our customer website.

technologies. For many years Avista has measured, tracked and reported on the reliability of our electric system, focusing on the number of outages and the duration of outages our customers experience on average each year.[15] These annual electric reliability results often vary from year-to-year due to a range of unavoidable factors such as weather. Therefore, any single-year's results may not provide a meaningful assessment of the overall status of the Company's system reliability. In our Customer Service Quality and Reliability report, Avista reports a five year rolling average of the number of outages and duration. This approach helps reduce the "noise" created by the year-to-year variability, and thus helps to more clearly depict the actual performance trends over time. Avista's long-term reliability trend has been fairly stable and with a slight improvement, as shown in Figure 11.

Figure 11 – Historical 5-Year Rolling Average of SAIDI and SAIFI (excluding Major Event Days)



In addition to the number of outages and their duration, in our annual Service Quality and Electric Reliability Report we report how we measure results, the geographic areas of greatest reliability concern on our electric system, and our strategies to improve service performance in those areas that tend to be problematic.

[15] The average number of outages, known as System Average Interruption Frequency Index (or SAIFI), and the average outage duration time in minutes, known as System Average Interruption Duration Index (or SAIDI), are two industry-wide reported statistics of reliability performance.

Reliability is considered as a factor in programs that include measures such as circuit undergrounding, rights of way relocation, accelerated or targeted vegetation management and wood pole inspection, improved fuse coordination, dividing individual feeders into two separate lines to reduce the effective exposure of all customers on the feeder, use of operating devices to sectionalize individual feeders, and other means to ensure our customers receive a reasonable level of service quality and reliability.

In the electric utility world, the traditional definitions of reliability such as number of outages and duration are evolving to include the emerging dimension of "grid resiliency."[16] Resiliency focuses on the utility's ability to anticipate, absorb, adapt to and/or rapidly recover from a potentially disruptive event.[17] Policies of national organizations such as the National Association of Regulatory Utility Commissioners (NARUC) view resiliency as separate and distinct from traditional reliability, noting the difference between *utility costs* and *lost value to customers.* Their policy definition of resilience focuses on the "robustness and recovery characteristics of utility infrastructure and operations," in response to extraordinary events. [18] Avista believes, in light of the current and trending expectations of customers for improving service quality and reliability, the likely future performance of our system, and the apparent increasing frequency of major storm events, that it is timely to better understand and evaluate resiliency as a potential new element of the reliability performance of our electric system.

Two examples of investments supporting our service quality and reliability objectives are as follows.

Washington Advanced Metering Infrastructure Project (AMI) - Avista is in the process of deploying advanced metering infrastructure across its Washington service territory in an effort to keep pace with the evolving metering standard of the industry and to deliver a range of cost-effective benefits to our customers. Avista is planning to begin deploying advanced metering in its Idaho service territory in 2020.

Customer Facing Technology Systems - A key investment in the area of customer facing technology is our development of a new customer website (www.avistautilities.com), which will better meet the expectations of our customers for expanded and improved self-service, as well as replace the aging technology platform of our customer website. Companies today are expected to deliver fast, easy, personalized, and intuitive self-service using this technology channel. Forrester research shows that the majority of consumers prefer to use a company's website to get answers to their questions rather than calling or sending an email. They further report that 77 percent of American consumers say "valuing my time" is the most important part of good online customer service.[19] Customers are

[16] The National Infrastructure Advisory Council (NIAC) says: "Infrastructure resilience is the ability to reduce the magnitude and/or duration of disruptive events.

[17] The National Infrastructure Advisory Council, "Critical Infrastructure Resilience Finance Report and Recommendations," September 8, 2009, page 8, https://www.dhs.gov/sites/default/files/publications/niac-critical-infrastructure-resilience-final-report-09-08-09-508.pdf

[18] Keogh, Miles and Christina Cody, National Association of Regulatory Utility Commissioners, "Resilience in Regulated Utilities", November 2013, https://pubs.naruc.org/pub/536F07E4-2354-D714-5153-7A80198A436D

[19] Leggett, Kate, "Demands for Effortless Service Must Influence Your Customer Strategy," Forrester Research, June 10, 2014.

looking for more than correct answers or quick response times. They want a consistent experience from their first interaction to the resolution of their issue. Gone are the days where customers would only compare you to your direct competitors. Today's customer compares you with all of the brands with whom they interact. The firm Accenture refers to this phenomenon as "liquid expectations."[20] As an example, even if Apple's products don't compete with yours, customers are comparing your website to Apple.com. Avista must ensure we can continue to meet the changing expectations of our customers in this rapidly evolving technology-enabled marketplace.

Table 5 below provides a summary of the capital investment for the Customer Service Quality and Reliability Investments driver:

Table 5 – Customer Service Quality and Reliability Investments Summary

	2017	2018	2019	2020	2021
AvistaUtilities.com Redesign	$1,500,000	$0	$0	$0	$0
Customer Facing Technology	$2,000,000	$2,000,000	$2,000,000	$2,000,000	$2,000,000
Washington AMI	$32,000,000	$53,000,000	$36,000,000	$14,300,000	$0
Idaho AMI	$0	$0	$0	$23,300,000	$47,700,000
Total	**$35,500,000**	**$55,000,000**	**$38,000,000**	**$39,600,000**	**$49,700,000**

The total dollar amounts in Table 5 above represent the total of the investment associated with the individual Business Cases within this Investment Driver category. The Business Cases explain why the projects are necessary in the time frame proposed, and address the costs, risks and/or consequences if the projects are not completed. There is also documentation associated with each Business Case supporting the need and timing of the investment.

C. Mandatory & Compliance Investments

Avista's Mandatory and Compliance investment drivers are defined as: ***"investments required to comply with laws, rules, and contracts that are external to the Company (e.g. State and Federal laws, Settlement Agreements, FERC, NERC, and FCC rules, and Commission Orders, and etc.)."*** Avista operates within a framework governed by national, state and local laws, and a complex range of regulations and ordinances. At the national level, the Federal Energy Regulatory Commission (FERC) regulates a range of natural gas and electric utility and energy related activities. Avista operates its hydroelectric facilities under licenses granted by the FERC, which regulates our activities in natural gas and electricity energy markets and electric transmission services. Under this federal regulatory umbrella, the North American Electric Reliability Corporation (NERC) oversees the operation of the country's interconnected electric grid. Regionally, the Western Electricity Coordinating Council (WECC) enforces the electric transmission reliability requirements in the western U.S. of which Avista is a part. Regulation of

[20] "How to Meet Liquid Expectations in Digital Government," Accenture Consulting, 2015, https://www.accenture.com/_acnmedia/Accenture/Conversion-Assets/DotCom/Documents/Global/PDF/Dualpub_24/Accenture-Meet-Liquid-Expectations-Digital-Government-Seamless-User.pdf#zoom=50

natural gas systems and operations is under the purview of the Federal Department of Transportation's Pipeline and Hazardous Materials Safety Administration (PHMSA), which enforces protocols for the operation, maintenance, and inspection of natural gas pipelines. Mandatory and compliance related investment drivers reflect these many legal and regulatory requirements that govern nearly every aspect of the operation of the Company.

Examples of a number of capital investment programs within this "investment driver" are provided below.

Clark Fork Projects - Avista operates the Noxon Rapids and Cabinet Gorge projects under a 45 year license granted by the Federal Energy Regulatory Commission. Terms of this license were negotiated between Federal and State agencies, Native American Tribes, and a range of other stakeholders, and includes hundreds of individual requirements aimed to protect, mitigate, and enhance environmental, wildlife, fisheries, recreational and cultural resources associated with the projects. State and Federal clean water, endangered species and other mandatory conditions are also part of the license. The expected capital investments required to comply with our license terms over the next five years are shown in Table 6.

Table 6 – Expected Clark Fork Relicensing Costs

	2017	2018	2019	2020	2021
Clark Fork Settlement Agreement	$17,725,511	$11,652,275	$8,221,044	$4,621,875	$10,793,831

Spokane River Projects – Avista operates the Spokane River projects under a 50 year license granted by the Federal Energy Regulatory Commission. As with the Clark Fork projects, Avista's Spokane River Hydroelectric projects are subject to a similar range of license requirements to protect, maintain and enhance a range of water quality, fisheries, wildlife, recreation, and cultural resources. The expected capital investments required to comply with these license terms over the next five years are shown in Table 7.

Table 7 – Expected Spokane River Relicensing Costs

	2017	2018	2019	2020	2021
Spokane River License Implementation	$2,033,064	$2,286,103	$533,001	$419,224	$613,280

Hydro Safety & Environmental Compliance – Avista promotes public safety at its hydroelectric facilities, including the installation and replacement of various warning signs, in-stream barriers, surveillance cameras, and warning systems designed to protect recreationalists and the general public. Investments expected to meet our hydro safety and other Clean Water Act requirements[21] over the next five years are shown in Table 8.

[21] These requirements are in addition to our hydroelectric project license requirements.

Table 8 – Expected Hydro Safety & Water Quality Costs

	2017	2018	2019	2020	2021
Hydro Safety Program	$350,000	$50,000	$55,000	$50,000	$55,000
Environmental Compliance	$400,000	$400,000	$400,000	$400,000	$400,000
Total	**$750,000**	**$450,000**	**$455,000**	**$450,000**	**$455,000**

Colstrip and Kettle Falls – Avista owns a 15 percent share of Units 3 and 4 at the Colstrip thermal generating station located in eastern Montana. This 'base-load' facility is generally in continuous operation at capacity except during the spring when abundant hydroelectric generation allows the plant to be shut down for annual maintenance inspections and repairs. Generation from Avista's share of Colstrip (approximately 222 MW) serves nearly one-sixth of the Company's average load requirements. Infrastructure investments required to maintain the plant vary with the planned or emergency capital needs and are governed by agreements among all six owners of the plant.

Since 1983, Avista's Kettle Falls generating station has produced electricity by converting wood waste into steam to power the turbine generator. Referred to as a "biomass" resource, the plant is rated at 53 MW and produces enough electricity to supply nearly 35,000 customers. Work is underway to upgrade the water treatment facility to meet permit requirements under the National Pollution Discharge Elimination System (NPDES). This project is scheduled to be completed in 2017. Investments expected to meet the requirements at these two stations are shown in Table 9.

Table 9 – Expected Colstrip & Kettle Falls Expenditures

	2017	2018	2019	2020	2021
Colstrip Thermal Capital	$9,500,000	$4,420,000	$10,370,000	$8,945,000	$2,940,000
Kettle Falls RO System	$4,250,000	$0	$0	$0	$0
Total	**$13,750,000**	**$4,420,000**	**$10,370,000**	**$8,945,000**	**$2,940,000**

Electric Transmission - Avista operates 685 miles of electric transmission lines rated at 230 kV and 1,565 miles of line rated at 115 kV. A majority of these lines are part of the national Bulk Electric Systems (BES). This means they are under the jurisdiction of North American Electric Reliability Corporation, whose objective is to promote the reliability, resiliency, and adequacy of the interconnected transmission system throughout the United States. Their responsibilities include developing standards for power system operation as well as monitoring and enforcing compliance with operation and planning standards. Avista has completed a number of planning studies on the capability of its transmission system in compliance with these requirements, and has identified segments that do not meet the mandatory standards. These segments, in the areas west of Spokane and west of Othello, Washington, will have to be reinforced in order to comply. The solution developed by the Company requires the reconstruction of a substation located at Westside, and the construction of new substations at Garden Springs in west Spokane and near Saddle Mountain (Othello, WA). The estimated cost of these mandatory investments over the next five years is shown in Table 10.

Table 10 –Transmission Investments

	2017	2018	2019	2020	2021
Garden Springs Substation Integration	$0	$3,025,000	$3,700,003	$2,250,000	$0
Saddle Mountain Transmission	$1,000,000	$4,000,000	$11,000,000	$0	$0
Westside Rebuild Phase One	$3,000,000	$0	$0	$0	$0
High Voltage Protection for Substation	$130,000	$10,000	$0	$0	$0
Noxon Switchyard Rebuild	$2,500,001	$0	$0	$5,000,000	$16,600,000
Transmission - NERC Low Priority Mitigation	$2,000,000	$1,500,000	$1,500,000	$1,500,000	$0
Transmission - NERC Medium Priority Mitigation	$2,000,000	$0	$0	$0	$0
Transmission Construction - Compliance	$11,775,000	$10,500,000	$12,500,000	$0	$0
Spokane Valley Transmission Reinforcement	$2,000,000	$3,250,001	$0	$0	$0
Colstrip Transmission	$325,118	$448,831	$391,160	$364,989	$442,445
Total	**$24,730,119**	**$22,733,832**	**$29,091,163**	**$9,114,989**	**$17,042,445**

Natural Gas – Avista has developed several programs under which investments are made to comply with requirements of the Pipeline and Hazardous Materials Safety Administration rules, including the inspection of pipelines, valves, cathodic protection,[22] and other above-ground systems. In addition to inspection and maintenance of piping and operating facilities, the Company is required to replace a portion of its natural gas meters each year. In addition to these regulatory requirements, Avista's natural gas facilities located in public rights-of-way must be moved at the Company's cost when required by the reconstruction or improvement of roadways. Avista owns a one-third share in the Jackson Prairie Natural Gas Storage facility located in Chehalis, Washington. This facility is operated by Puget Sound Energy and Avista is required to pay its share of the infrastructure investments that address repairs, replacements, and upgrades needed to maintain and safely operate the facility. Expected investments required to meet these obligations are presented in Table 11.

Table 11 –Natural Gas System Investments

	2017	2018	2019	2020	2021
Gas HP Pipeline Remediation Program	$3,000,000	$3,000,000	$3,000,035	$3,000,000	$3,000,000
Gas Overbuilt Pipe Replacement Program	$500,000	$500,000	$500,000	$500,000	$400,000
Gas Cathodic Protection Program	$800,000	$700,000	$700,000	$700,000	$700,000
Gas Isolated Steel Replacement Program	$2,050,000	$2,000,000	$2,000,000	$2,000,000	$2,000,000
Gas Facilities Replacement Program	$21,762,977	$20,700,000	$21,159,533	$21,629,267	$22,109,429
Gas N-S Corridor Greene St HP Main Project	$100,022	$0	$0	$0	$0
Gas Replacement Street & Highway Program	$3,000,000	$3,000,000	$3,000,000	$3,000,000	$3,000,000
Gas PMC Program	$1,200,000	$1,200,000	$1,200,000	$1,200,000	$1,200,000
Jackson Prairie Storage	$1,626,666	$1,562,333	$1,482,667	$1,478,333	$1,483,000
Total	**$34,039,665**	**$32,662,333**	**$33,042,235**	**$33,507,600**	**$33,892,429**

Other Mandatory Programs – Avista operates a portion of its facilities on lands owned by Native American Tribes, and must comply with specific permit requirements including recurring payments and easement renewals. The FCC has required companies like Avista to move their private communications networks to a new frequency band, requiring the replacement of our radio communication system. The Company is also required to comply with mandatory terms of franchise and other agreements, which at times require Avista to relocate our facilities, at our cost,

[22] Systems that prevent corrosion of steel piping.

that are located in dedicated public rights-of-way. The estimated cost of these other mandatory investments over the next five years is shown in Table 12.

Table 12 – Other Mandatory Investments

	2017	2018	2019	2020	2021
Next Generation Radio Refresh	$100,000	$0	$0	$0	$0
Elec. Replacement/Relocation	$2,600,000	$2,700,000	$2,800,000	$3,000,000	$3,100,000
Tribal Permits & Settlements	$300,000	$249,999	$149,999	$250,000	$250,000
Franchising for WSDOT	$200,002	$200,002	$200,002	$200,002	$200,002
Total	**$3,200,002**	**$3,150,001**	**$3,150,001**	**$3,450,002**	**$3,550,002**

Table 13 below provides a summary of the capital investment for the Mandatory and Compliance Investments driver:

Table 13 – Mandatory and Compliance Investments Summary

	2017	2018	2019	2020	2021
Mandatory & Compliance Costs	$96,228,361	$77,354,544	$84,862,444	$60,508,690	$69,286,987

The total dollar amounts in Table 13 above represent the total of the investment associated with the individual Business Cases within this Investment Driver category. The Business Cases explain why the projects are necessary in the time frame proposed, and address the costs, risks and/or consequences if the projects are not completed. There is also documentation associated with each Business Case supporting the need and timing of the investment.

D. Performance & Capacity Investments

Energy delivery systems are analogous to transportation systems, where the carrying capacity and classes of roadways are comparable to the transfer capacity of electric circuits or natural gas pipelines. Unlike transportation systems, however, where too many vehicles simply results in slower traffic, when the use on energy facilities exceeds the designed capability it is often manifested as stress and damage to equipment, overall system instability, and failures that result in customer service interruptions. Avista has established limits on the performance of its energy facilities as guided by industry accepted practices and prescribed by internal policies, procedures, and standards. The investment driver that addresses investments required to meet these standards is defined as: ***"a range of investments that address the capability of assets to meet defined performance standards, typically developed by the Company, or to maintain or enhance the performance level of assets based on need or financial analysis."*** Avista has grouped 20 projects and programs under this investment driver, represented in three functional groups: 1) Electric Energy Delivery; 2) Natural Gas Delivery, and 3) Office Facilities & Technology Systems.

Electric and natural gas delivery facilities are subject to complex limitations that include such examples as limits on voltage, temperature, or pipeline pressure. Some infrastructure such as large generating stations, electric transmission lines, and natural gas pipelines, must be operated within performance limits established by federal and state regulatory authorities. The supporting computer hardware, software, networks, and telecommunication systems have physical limitations

generally described in terms of computer memory, refresh times, or the capacity to transmit voice and data over computer and telecommunication networks. Other infrastructure affected by performance or capacity issues are associated with construction tools, fleet, and administrative offices and operations facilities.

Electric Energy Delivery – Investments in Avista's Electric Energy Delivery systems related to performance and capacity issues share the common need to remedy circumstances where current system capacity is insufficient to meet future demand. How do we determine these acceptable capacity limits? Virtually all electric energy delivery projects or programs have a direct or indirect link to the National Electric Safety Code (or Code). The Code represents the collective engineering and operating knowledge for electric utility systems with special emphasis on transmission, substation, and distribution systems. Though Avista develops and maintains multiple internal standards guiding the design, construction, and operation of electric distribution facilities, each standard is linked to the Code, which has a significant bearing on our practices and decision-making strategies. In addition to meeting capacity needs and standards, Avista also considers opportunities to improve the performance of our systems for customers and save them money. The Electric Energy Delivery projects currently represented in the Performance & Capacity investment driver are included in Table 14.

Table 14 –Electric System Performance & Capacity Investments

Electric Projects	2017	2018	2019	2020	2021
LED Change Out Program	$2,899,925	$1,999,994	$2,319,930	$2,000,000	$0
SCADA - Install/Replace	$0	$2,500,000	$6,000,000	$7,670,000	$7,670,000
Segment Reconductor & FDR Tie Program	$5,175,848	$4,899,994	$5,000,505	$5,000,000	$5,000,000
Substation - Capital Spares	$4,200,000	$5,065,000	$4,025,000	$4,025,000	$4,025,000
Substation - New Distribution Stations	$25,000	$4,200,013	$3,000,042	$2,500,000	$2,500,000
Total	**$12,300,773**	**$18,665,001**	**$20,345,477**	**$21,195,000**	**$19,195,000**

Natural Gas Delivery – Upgrades or replacements to Natural Gas Delivery systems are also driven by performance standards and criteria. Avista plans for upgrades to its natural gas distribution system based on system capacity modeling and its Integrated Resource Plan (Natural Gas IRP). The primary natural gas planning principles are as follows:

Winter Design Degree Day – Avista plans for prolonged cold temperatures ranging from minus 10 to minus 25 degrees Fahrenheit where the combination of space, water, and other uses are combined to determine the pipeline capacity needed to adequately serve the load. As demand increases, customers near the end of a pipeline system can be left without gas supply if the system is not adequately upgraded to meet the growing peak demand.

Urban Commercial Zones – Most of our natural gas systems are "radial" in nature, meaning there is only one pipeline source available to serve a given area. As a result, a service disruption at a given point in the system will cause customers "downstream" to lose service. In urban zones, however, to help support volume and pressure demands, it may be cost effective to "network" gas pipelines (i.e. provide more than one pipeline source to serve a given area). In these networks, valve isolation systems are designed to allow for planned pipe replacements and to isolate pipe sections away from the area where the service has been disrupted. Computer analysis is used to evaluate whether the system can support customer demand during isolation events.

Capacity issues on the natural gas distribution system require a combination of monitoring current use patterns and also forecasting future demand. This balancing act is a common theme for nearly all Avista infrastructure planning, determining how to best meet the needs of today's customers while planning to meet future needs. Table 15 presents the five-year outlook for natural gas reinforcement projects and programs related to Performance & Capacity. The specific 'grid capacity' projects are noted individually.

Table 15 – Natural Gas Performance and Capacity Investments

Natural Gas Projects	2017	2018	2019	2020	2021
Cheney HP Reinforcement	$0	$100,007	$4,900,003	$0	$0
Gas Pierce Rd La Grande HP Reinforcement	$3,489,998	$0	$0	$0	$0
Gas Pullman HP Reinforcement	$0	$0	$100,007	$2,400,000	$0
Gas Rathdrum Prairie HP Main Reinforcement Project	$4,000,000	$4,000,000	$0	$0	$0
Gas Schweitzer Mtn Rd HP Reinforcement	$0	$1,500,005	$0	$0	$0
Gas Warden HP Reinforcement	$0	$99,955	$5,899,973	$0	$0
Gas Reinforcement Program	$1,000,000	$1,000,000	$1,000,000	$1,000,000	$1,000,000
Gas Telemetry Program	$200,000	$200,000	$200,000	$200,000	$200,000
Total	**$8,689,998**	**$6,899,967**	**$12,099,983**	**$3,600,000**	**$1,200,000**

Office Facilities & Technology – Support systems including office facilities, warehouse structures, storage and yards, and construction operation centers, together with information technology systems, are vital to our ability to deliver service to our customers. Technology systems support financial reporting, energy trading, our customer service center and website, as well as wide ranging work processes both internal and external to the Company. But computer control and communications systems have also become an integral part of monitoring and operating both our electric and natural gas systems. The trend toward automation, distributed generating resources, energy storage, and direct consumer interaction is transforming the electric grid from an energy supply conduit to an integrated energy services system. These performance and capacity investments range from those made to enhance worker safety and productivity to increased bandwidth for communication and data systems, and the need to modernize and expand facilities to keep pace with current and future needs. Table 16 is a summary of the five-year project and programs associated with Avista's facilities and technology infrastructure.

Table 16 – Office Facilities & Technology Investments

Project	2017	2018	2019	2020	2021
Technology					
Enterprise Business Continuity Plan	$450,000	$450,000	$450,001	$450,000	$450,000
Enterprise Security	$3,200,000	$3,200,000	$3,200,000	$3,200,000	$3,200,000
Mobility in the Field	$500,000	$500,000	$500,000	$500,000	$500,000
Technology Expansion to Enable Business Process	$14,000,002	$14,000,001	$14,000,001	$14,000,000	$19,000,000
Energy Imbalance Market	$0	$0	$4,200,000	$7,000,000	$300,000
Facilities					
COF LngTrm Restruct Ph2	$11,200,000	$10,000,000	$14,000,000	$10,000,000	$4,000,000
Jack Stewart Training Center Expansion	$0	$0	$4,000,000	$6,300,000	$0
Company Aircraft Capital	$500,000	$2,500,000	$0	$0	$0
New Airport Hangar	$1,500,000	$0	$0	$0	$0
New Pullman Service Center	$0	$0	$2,000,000	$5,600,000	$0
New Deer Park Service Center	$1,650,000	$4,500,000	$0	$0	$0
Ergonomic Equipment	$300,000	$300,000	$0	$0	$0
Downtown Campus	$4,000,000	$0	$0	$0	$0
Apprentice Training	$60,000	$60,000	$60,000	$60,000	$60,000
Total Technology & Facilities	**$37,360,002**	**$35,510,001**	**$42,410,002**	**$47,110,000**	**$27,510,000**

Table 17 below provides a summary of the capital investments for the Performance and Capacity Investments driver:

Table 17 – Performance and Capacity Investments Summary

	2017	2018	2019	2020	2021
Performance & Capacity	$58,350,773	$61,074,969	$74,855,462	$71,905,000	$47,905,000

The total dollar amounts in Table 17 above represent the total of the investment associated with the individual Business Cases within this Investment Driver category. The Business Cases explain why the projects are necessary in the time frame proposed, and address the costs, risks and/or consequences if the projects are not completed. There is also documentation associated with each Business Case supporting the need and timing of the investment.

E. Asset Condition Investments

Assets of every type degrade with age, usage and other factors, and must be replaced or substantially rebuilt at some point in order to ensure we can continue to deliver reliable and cost effective service. Projects or programs in this category of need are defined as: **"*investments to replace assets based on established asset management principles and systematic programs adopted by the Company, which are designed to optimize the overall lifecycle value of the investment for our customers*."** The replacement of assets based on condition is essentially the practice of removing them from service and replacing them at the end of their useful life. Across

the utility industry[23], and likewise for Avista, the replacement of assets based on condition often constitutes the largest portion of the infrastructure investments required each year. The bulk of Avista and the nation's energy delivery systems were constructed in the period after World War II and generally into the 1970s[24] when economic growth and expansion fueled the construction of new energy infrastructure.[25] The average age of the nation's major infrastructure, including energy systems, has increased over the last 30-40 years.[26] Our Company, like the rest of the nation, has stepped up the level of investments needed to accommodate the orderly replacement of the facilities built during this period of expansion, and that have now reached or are approaching the end of their useful life. [27] In a survey of 433 U.S. electric utility executives who listed their top three most pressing challenges, 47% listed "old infrastructure," with the next infrastructure issue reported as "Grid Reliability" (17%) and Smart Grid Deployment (16%).[28]These infrastructure investments are required to uphold the capability of our generators, service facilities, overhead wires and poles, and underground pipes and cables, among other assets.

At Avista, our aim is to optimize the value of each particular asset group over their service life. When we say "optimize" we aim to achieve the lowest possible lifecycle cost that allows us to meet a variety of important performance objectives, such as electric system reliability, and the efficient use of employee crews. Avista's efforts to achieve the optimized value of its many assets has been aided by the recent application of new asset management standards, approaches and analytical tools. To this end, an asset management system supports decisions on what assets we should build or purchase, the type of maintenance program needed to support each asset, how factors such as system reliability are considered in asset life and performance decisions, and when and how an asset should be rebuilt or replaced.

Systematic Infrastructure Management Programs - When Avista's asset management group conducts studies of the lifecycle practices of individual or groups of assets, that analysis is essentially evaluating a systematic and proven practice already in place that governs the inspection, repair, and replacement of that infrastructure. "Systematic" programs are based on the Company's experience, insight, expertise, manufacturers' recommendations, industry standards, and best practices. Usually based on regular inspections and assessment of asset condition and performance, these are accompanied by a responsive programmatic plan for maintenance and replacement.

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[23] "In their 2015 "State of the Electric Utility" survey, Utility Dive asked 433 U.S. electric utility executives about the three most pressing challenges for their utility. Old Infrastructure took the top spot at 47%. (T&D Investment Considerations Supporting the Future Electric Grid. Osmose. 2016. http://osmose.com/newsletter-2015-q2-td-investment-considerations.).
Petition of PECO Energy Company For Approval Of Its Electric Long Term Infrastructure Improvement Plan And To Establish A Distribution System Improvement Charge For Its Electric Operations. Docket No. P-2015-2471423. Case 12-E-0201, Proceeding on Motion of the Commission as to the Rates. Charges, Rules and Regulations of Niagara Mohawk Power Corporation d/b/a National Grid for Electric Service; Five Year Transmission and Distribution Capital Investment Plan, FY17-FY21.

[24] This cycle of utility investment ended as early as the 1960s for some utilities and through the early 1980s for others such as Avista.

[25] Powering a Generation: Power History #3. http://americanhistory.si.edu/powering/past/h2main.htm.

[26] Failure To Act: The Economic Impact of Current Investment Trends in Electricity Infrastructure. American Society of Civil Engineers. 2011.
This Chart About Power Lines Says a Lot About How the US Electricity System is Changing. Vox Media. 2014.

[27] Seattle City Light Strategic Plan 2013-2018.
From Growth to Modernization: The changing capital focus of the US utility sector. Deloitte Development, LLC. 2016.

[28] Why Utilities are Rushing to Replace and Modernize the Aging Grid: State of the Electric Utility 2015. Utility Dive.

Examples include: Inspection and Maintenance Cycles for Individual Turbines and Generators, Buildings and Internal Mechanical Systems, such as HVAC and Enterprise Technology Applications and Systems. Avista has a great depth of experience and insight when it comes to the management of its investments, which is embedded in its "systematic" practices for each type of asset. This experience ranges from literally more than a century of operating history with individual turbine-generator units, to inspection and condition-based management programs, familiarity and adoption of industry best practices, implementation of manufacturers' maintenance and replacement guidelines, the use of conventional engineering and financial practices and analyses, and the development of new and innovative ways to extend the service life and lifecycle value of certain assets.[29] The Company continues to rely on a range of these proven systematic programs for managing key asset groups across the business.

Accordingly, asset management analysis of the Company's infrastructure is the application of new analytical methodologies to existing systematic business processes or programs with the goal of assessing whether an existing program can be improved in a way that creates incremental and sustainable financial value for our customers. In some instances, the limited potential for incremental gain does not warrant an asset analysis and the systematic program is maintained. For those programs that do merit further evaluation, the group identifies asset management plans that will be developed in future work.

Capital Projects and Programs Based on Asset Condition **-** The capital projects and programs included under Asset Condition represent the largest portion of the Company's annual capital spending by investment driver (35%). Because of the size of this group, we have summarized the investments by the following types: (1) Energy Infrastructure, (2) Infrastructure Management, (3) Service Operations, and (4) Enabling Infrastructure.

1. Energy Infrastructure - Capital projects and programs in this category represent direct investments to electric generating stations, transmission facilities, substations, and distribution system, as well as natural gas regulation, distribution and metering, as listed in Table 18.

[29] Innovations to extend life such as our distribution pole stubbing practices.

Table 18 – Energy Infrastructure Investments Based on Asset Condition

Investments in Energy Infrastructure Based on Asset Condition					
	2017	**2018**	**2019**	**2020**	**2021**
Gas Deteriorated Steel Pipe Replacement Program	$1,000,000	$1,000,000	$1,000,000	$1,000,000	$1,000,000
Gas ERT Replacement Program	$240,000	$260,000	$280,000	$330,000	$716,000
Gas Regulator Stn Replacement Program	$800,000	$800,000	$800,000	$800,000	$800,000
Cabinet Gorge Station Service Replacement	$500,000	$2,100,000	$1,475,000	$200,000	$0
Kettle Falls Stator Rewind	$4,930,000	$0	$0	$0	$0
Little Falls Install Obermeyer Gate	$223,000	$3,100,000	$6,100,000	$5,300,000	$0
Little Falls Plant Upgrade	$10,000,000	$6,800,000	$0	$0	$0
LL HED Emergency Generator Plant	$0	$0	$0	$75,000	$650,000
Long Lake Plant Upgrades	$450,000	$4,800,000	$5,850,000	$7,900,000	$11,950,000
Generation DC Supplied System Upgrade	$1,315,000	$1,743,000	$1,740,000	$1,700,000	$1,700,000
Nine Mile Rehab	$9,078,000	$8,575,000	$7,322,000	$0	$0
Noxon Station Service	$1,171,577	$118,208	$0	$0	$0
Peaking Generation	$500,000	$500,000	$500,000	$500,000	$500,000
Post Falls Redevelopment	$2,100,000	$4,800,000	$4,800,000	$26,655,000	$26,655,000
Replace Cabinet Gorge Gantry Crane	$3,400,000	$236,813	$0	$0	$0
Distribution Grid Modernization	$13,699,486	$13,999,838	$14,499,871	$15,000,000	$15,500,000
Distribution Transformer Change-Out Program	$3,000,000	$1,200,000	$1,200,000	$1,200,000	$0
Distribution Wood Pole Management	$9,000,000	$9,500,001	$9,500,000	$9,000,000	$12,000,000
Primary URD Cable Replacement	$500,000	$1,000,004	$1,000,004	$1,000,004	$1,000,004
Substation - Asset Mgmt. Capital Maintenance	$4,151,431	$4,192,231	$4,185,209	$4,185,130	$4,185,130
Substation - Station Rebuilds	$7,799,997	$7,040,035	$8,900,090	$8,460,000	$11,200,000
Transmission - Major Rebuild - Asset Condition	$9,525,000	$12,000,000	$11,050,000	$23,500,000	$24,500,000
Total	**$83,383,491**	**$83,765,130**	**$80,202,174**	**$106,805,134**	**$112,356,134**

2. Infrastructure Management - Investments in this category of asset-condition based capital replacements include software and hardware applications, communications systems, operating devices and equipment, and capital service contracts that support energy infrastructure operations. These individual programs are listed in Table 19.

Table 19 – Infrastructure Management Investments Based on Asset Condition

Infrastructure Management Investments					
	2017	**2018**	**2019**	**2020**	**2021**
Project Atlas	$6,500,001	$6,499,997	$5,999,998	$11,000,000	$10,100,000
Automation Replacement	$650,000	$650,000	$650,000	$650,000	$650,000
Cabinet Gorge Automation Replacement	$1,561,000	$532,000	$0	$0	$0
Kettle Falls CT Control Upgrade	$0	$668,652	$0	$0	$0
Purchase Certified Rebuilt Cat D10R Dozer	$700,000	$0	$0	$0	$0
SCADA - SOO & BUCC	$1,054,006	$919,958	$1,012,993	$920,000	$920,000
Total	**$10,465,007**	**$9,270,607**	**$7,662,991**	**$12,570,000**	**$11,670,000**

3. Service Operations - The capital investments in this classification include the facilities required to support company operations and work processes. These programs are listed in Table 20.

Table 20 – Service Operations Investments Based on Asset Condition

Investments in Service Operations Infrastructure Based on Asset Condition					
	2017	**2018**	**2019**	**2020**	**2021**
Noxon & Clark Fork Living Facilities	$1,475,100	$737,550	$0	$0	$0
Dollar Rd Service Center Addition and Remodel	$7,000,001	$9,000,000	$0	$0	$0
New Davenport Facility	$0	$0	$6,500,000	$0	$0
COF Long-Term Restructuring Plan	$200,000	$0	$0	$0	$0
Sandpoint Renovation	$0	$0	$3,500,000	$2,000,000	$0
Structures and Improvements/Furniture	$3,000,000	$3,600,000	$3,600,000	$3,600,000	$3,600,000
Total	**$11,675,101**	**$13,337,550**	**$13,600,000**	**$5,600,000**	**$3,600,000**

4. Enabling Infrastructure - The capital investments in this classification include communication systems, transportation and heavy equipment as well as a range of information technology hardware and software systems relied upon by the Company to provide service and to enable wide-ranging business processes. These programs are listed in Table 21.

Table 21 – Enabling Infrastructure Investments Based on Asset Condition

Investments in Enabling Infrastructure Based on Asset Condition					
	2017	**2018**	**2019**	**2020**	**2021**
Microwave Refresh	$3,727,143	$1,840,000	$1,900,001	$1,900,000	$0
Technology Refresh to Sustain Business Process	$17,765,453	$18,000,000	$18,000,001	$18,000,000	$23,000,000
Fleet Budget	$8,400,000	$7,700,000	$7,700,000	$7,700,000	$7,700,000
Total	**$29,892,596**	**$27,540,000**	**$27,600,002**	**$27,600,000**	**$30,700,000**

Table 22 below provides a summary of the capital investment for the Asset Condition Investments driver:

Table 22 – Asset Condition Investments Summary

Investments in Enabling Infrastructure Based on Asset Condition					
	2017	**2018**	**2019**	**2020**	**2021**
Energy Infrastructure	$83,383,491	$83,765,130	$80,202,174	$106,805,134	$112,356,134
Infrastructure Management	$10,465,007	$9,270,607	$7,662,991	$12,570,000	$11,670,000
Service Operations Infrastructure	$11,675,101	$13,337,550	$13,600,000	$5,600,000	$3,600,000
Enabling Infrastrucutre	$29,892,596	$27,540,000	$27,600,002	$27,600,000	$30,700,000
Total	**$135,416,195**	**$133,913,287**	**$129,065,167**	**$152,575,134**	**$158,326,134**

The total dollar amounts in Table 22 above represent the total of the investment associated with the individual Business Cases within this Investment Driver category. The Business Cases explain why the projects are necessary in the time frame proposed, and address the costs, risks and/or consequences if the projects are not completed. There is also documentation associated with each Business Case supporting the need and timing of the investment.

F. Failed Plant & Operations Investments

The Failed Plant and Operations investment driver is defined as: ***"requirements to replace assets that have failed and which must be replaced in order to provide continuity and adequacy of service to our customers (e.g. capital repair of storm-damaged facilities). Also includes investments in natural gas and electric infrastructure that are performed by Avista's operations staff."*** Avista responds to various types of equipment failures each year resulting from a range of factors, some of which result in service outages for our customers. These failures are caused by wind and other storm events, traffic accidents, third party damage to natural gas and buried electric cables, and failure due to asset age and condition. In addition to replacing assets that have failed, Avista's operations staff performs a wide range of limited capital infrastructure work that does not rise to the level of a project or program. This work includes the need to reconfigure, replace, repair, and upgrade electric and natural gas facilities for a variety of reasons. For example, electric distribution systems are protected by a network of fuses. Changes in customer demand and load additions prompt revisions to the system of 'coordinated fusing' in order to properly protect equipment from line faults. Customer requested projects may also provide the opportunity to cost-effectively repair or replace distribution equipment that is not attributable to the end-use customer, but which is necessary to maintain service or to meet our design standards.

Avista manages six primary programs to address operating issues such as equipment failure, operator safety, facility inspections, and ancillary capital investments. Investment needs by program are provided in Table 23, and the following narrative provides a brief description of the major programs.

Table 23 – Expected Needs by Program

	2017	2018	2019	2020	2021
Gas Non-Revenue Program	$6,000,000	$6,000,000	$6,000,000	$6,000,000	$6,000,000
Base Load Hydro	$1,149,000	$1,149,000	$1,149,000	$1,149,000	$1,149,000
Regulating Hydro	$3,533,000	$3,533,000	$3,533,000	$3,533,000	$3,533,000
Base Load Thermal Plant	$2,200,000	$2,200,000	$2,200,000	$2,200,000	$2,200,000
Storms	$3,183,000	$3,278,000	$3,377,000	$3,169,000	$3,200,000
Spokane Electric Network	$2,300,000	$2,300,000	$2,300,000	$2,300,000	$2,300,000
Distribution Minor Rebuild	$8,867,270	$8,900,000	$8,900,000	$8,900,000	$8,900,000
Transmission Minor Rebuild	$1,780,250	$1,843,420	$1,908,117	$1,970,022	$2,015,000
Meter Minor Blanket	$505,000	$300,000	$300,000	$300,000	$300,000
Capital Tools & Stores Equipment	$2,400,000	$2,400,000	$2,400,000	$3,000,000	$3,150,000
Total	**$31,917,520**	**$31,903,420**	**$32,067,117**	**$32,521,022**	**$32,747,000**

Natural Gas –Disruptions to natural gas service are generally the result of 'dig-ins' by a third party. On average, Avista responds each year to over five hundred incidents associated with ruptured gas lines. The investment made to repair damaged lines often requires follow-up replacements of steel main line segments, valves, service lines, or cathodic protection systems.

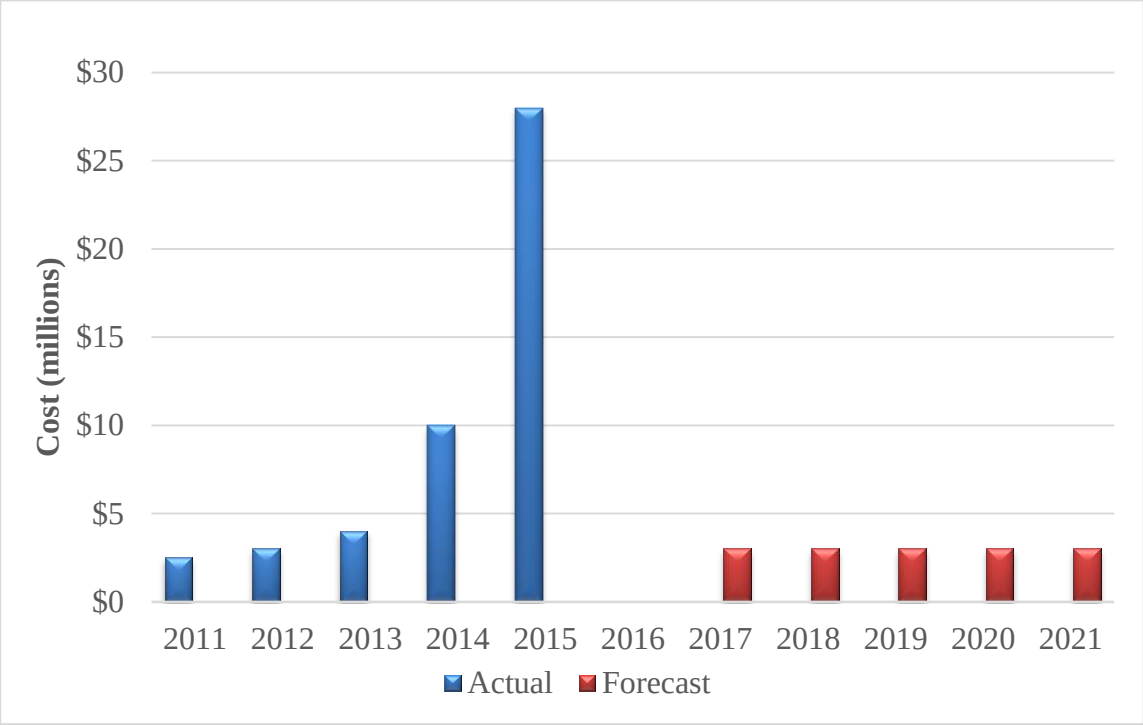
Electric Transmission and Distribution - Field activities associated with maintaining primary and service voltage wires and cables are related to both outage events and ancillary work to extend service or upgrade facilities. These activities include:

1. Repair of broken or damaged equipment (not related to an outage);

2. Addition of conductor or cable to support three-phase customer loads;
3. Replacing undersized wires or cables associated with end-use customers;
4. Reconfiguration of overhead lines to maintain safety zone clearances for joint users;[30]
5. Modifications of overhead lines to protect large birds from electrocution;
6. Repair or replacement of wire or equipment that has been stolen (e.g. copper wire).

Emergency Storm - On November 17, 2015, Avista experienced the largest single storm event in its history, with nearly 6,000 individual outages on a single day that impacted over 125,000 electric customers. In 2014, Avista suffered three significant windstorms resulting in 20,000 to 50,000 customer outages in each event. By contrast, in 2016, Avista experienced no emergency storm costs, as shown in Figure 12. Capital repairs during major storms are generally limited to the electric distribution and transmission grids, but can include substation and communication facilities.

Figure 12 – Emergency Storm Response Costs



Generation - In addition to its hydroelectric projects, and the Colstrip and Kettle Falls thermal projects, Avista has several natural gas-fired generating stations. Investments in this category that are required to maintain and operate all of these facilities include work in response to equipment breakdowns, routine inspections of equipment and emergency replacements, and operator safety.

[30] Joint users are other utility service providers such as telephone or cable that are allowed by law to use our poles to support their facilities for a fee.

Spokane Secondary Electric Network - Avista serves the core business district of downtown Spokane via an underground "network" that provides highly-reliable service to this customer group. Most mid-size to large cities operate the same type of electric network, including for example, Seattle, Portland, and Tacoma. The network is made up of heavy electric cable in concrete-reinforced pathways and major equipment such as large underground transformers. Because the network is composed of extensive equipment all placed underground, and in reinforced concrete to withstand heavy traffic, the investments needed to maintain, repair, and replace these systems is significant.

Table 24 below provides a summary of the capital investment for the Failed Plant and Operations Investments driver:

Table 24 – Expected Failed Plant and Operations Investments

	2017	2018	2019	2020	2021
Failed Plant & Operations Costs	$31,917,520	$31,903,420	$32,067,117	$32,521,022	$32,747,000

The total dollar amounts in Table 24 above represent the total of the investment associated with the individual Business Cases within this Investment Driver category. The Business Cases explain why the projects are necessary in the time frame proposed, and address the costs, risks and/or consequences if the projects are not completed. There is also documentation associated with each Business Case supporting the need and timing of the investment.

Appendix 1: 2016 Service Quality Report Card

AVISTA

2016 Service Quality Report Card

Each year Avista measures how well we perform in meeting our goal to provide the best customer service possible. In line with that tradition, we established a set of Service Quality Measures in collaboration with the Washington Utilities and Transportation Commission (WUTC) and others. We will be providing this annual report card to customers showing how we are doing on meeting these goals. For more information, visit **www.avistautilities.com.**

Customer Service Measures	Benchmark	2016 Performance	Achieved
Percentage of customers satisfied with our Contact Center services	At least 90%	92.7%	✓
Percentage of customers satisfied with our field services	At least 90%	94.7%	✓
Number of complaints filed with the WUTC annually per 1,000 customers	Less than 0.40	0.25	✓
Percentage of calls answered live within 60 seconds by our Contact Center	At least 80%	81.7%	✓
Average time from customer call to arrival of field technicians in response to electric system emergencies	No more than 80 minutes	39.3 Minutes	✓
Average time from customer call to arrival of field technicians in response to natural gas system emergencies	No more than 55 minutes	48.4 Minutes	✓

Electric System Reliability	5-Year Average (2012-2016)	2016 Performance	Change in 5-Year Average
Number of non-major storm-related power outages annually per customer	1.04	.86	-0.05
Length of non-major storm-related power outages annually per customer	142 Minutes	133 Minutes	+3 Minutes

Customer Service Guarantees	Successful	Missed	$ Paid
Keep service appointments scheduled with our customers	1,477	10	$500
Restore service within 24 hours of a customer reporting an outage (excluding major storm events)	26,344	1	$50
Turn on power within a business day of receiving the request	3,380	3	$150
Provide a cost estimate for new electric or natural gas service within 10 business days of receiving the request	5,024	0	$0
Investigate and respond to a billing inquiry within 10 business days if unable to answer a question on first contact	1,760	0	$0
Investigate a reported meter problem or conduct a meter test and report the results within 20 business days	309	2	$100
Notify customers at least 24 hours in advance of a planned power outage lasting longer than 5 minutes	30,336	349	$17,450
Totals	**68,630**	**365**	**$18,250**

2016 Performance Highlights

Thankfully 2016 was a relatively quiet year for customer outages compared to 2015, which included the unpreceded wind event on November 17th in the Spokane area that impacted a substantial portion of Avista's electric system. In 2016 we experienced no major storm events in terms of customer outages and only a few storms that had a significant impact on our service. The leading cause of outages in 2016 was damage to overhead equipment, followed by planned outages needed to allow Avista to safely perform work on its system.

On January 1, 2016, Avista launched its Customer Service Guarantees program listed above. Our commitments under the customer service guarantees reflect the level of service we currently provide. However, the guarantees recognize the customer inconvenience that may arise when our delivered service does not meet our commitment. In these cases we provide customers a bill credit or payment in the amount of $50 in recognition of their inconvenience. All costs associated with the payment of customer service guarantees are paid by Avista's shareholders, not by customers. We are pleased to report that for the first year of the program there were 68,630 successful interactions, which represents 99.5% of all customer interactions that are part of the Customer Service Guarantees. We missed our service commitment 365 times in 2016, which resulted in total payments to those customers of $18,250.

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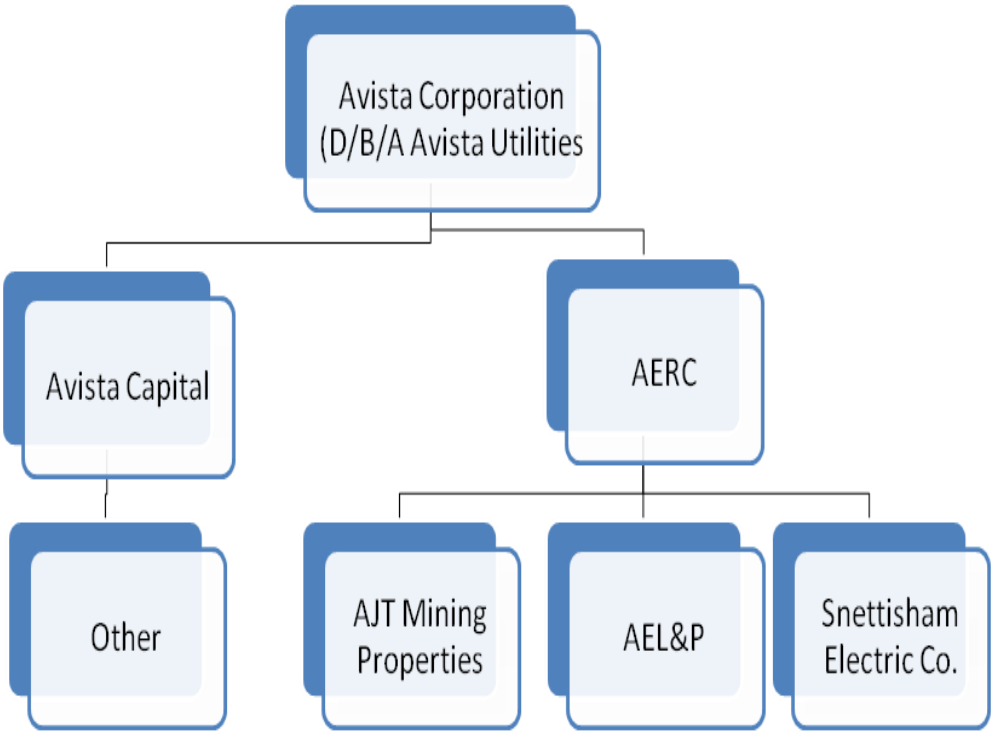
Description of Avista Utilities:

Avista Utilities provides electric and natural gas service within a 30,000 square mile area of eastern Washington and northern Idaho[1]. Of the Company's 374,384 electric and 336,043 natural gas customers (as of December 31, 2016), 245,916 and 156,777, respectively, were Washington customers. The Company, headquartered in Spokane, also provides natural gas distribution service in southwestern and northeastern Oregon. A map showing Avista's electric and natural gas service areas is provided in Exh. SLM-5.

As of December 31, 2016, Avista Utilities had total assets (electric and natural gas) of approximately $5.0 billion (on a system basis), with electric retail revenues of $760 million (system) and natural gas retail revenues of $294 million (system). As of December 2016, the Utility had 1,742 employees.

[1] Avista also serves approximately 31 retail electric customers in western Montana.


Avista Corporation
(D/B/A Avista Utilities
Avista Capital
AERC
Other
AJT Mining
Properties
AEL&P
Snettisham
Electric Co.

Avista's Electric and Natural Gas Service Areas

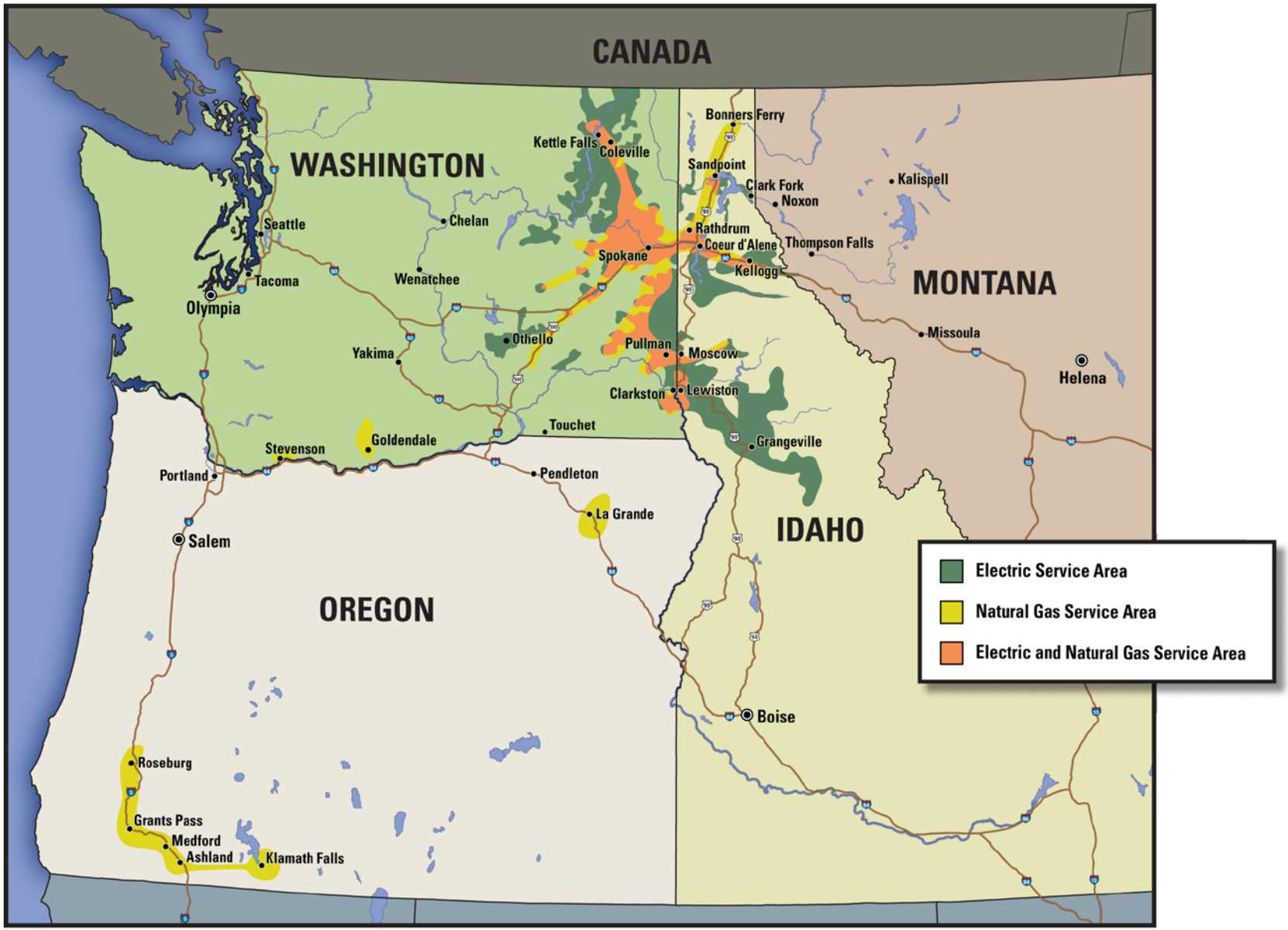


Exhibit No. 1
Case Nos. AVU-E-17-01/AVU-G-17-01
S. Morris, Avista
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