

Economic Development in Appalachian Power

SB 966 December 1, 2018



BOUNDLESS ENERGY"

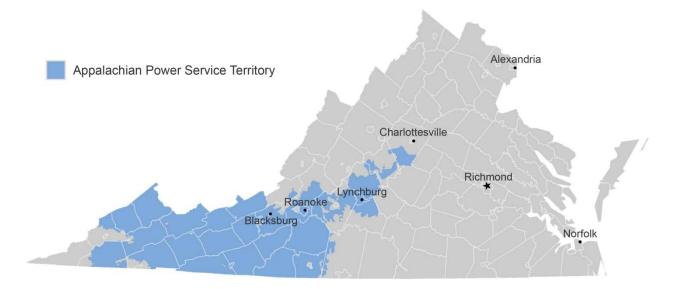
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Introduction

For over a century, Appalachian Power has been helping hometowns across our Virginia service territory grow and prosper. Appalachian Power is involved in every aspect of economic development. From site selection to incentives for community development, our work directly helps companies make investment decisions in Virginia. We partner closely with our local, regional, and state partners to recruit new companies and investments, retain and support existing businesses, and prepare communities for economic growth opportunities.

At Appalachian Power, we have staff and resources dedicated to fulfill our economic development mission. Our parent company, American Electric Power (AEP), provides corporate economic development services for the benefit of Appalachian Power and its other six subsidiaries. This report will outline economic development activities of both Appalachian Power and AEP.



Appalachian Power's economic development focus spans the 36 counties in our southwestern and central Virginia service territory. In addition to our collaboration with the Virginia Economic Development Partnership, the Virginia Tobacco Commission and the Virginia Port Authority, we also support five regional economic development organizations and 36 local economic development organizations.

Please see <u>Appendix A</u> for a detailed map of our local, regional and state economic development partners.

Appalachian Power Economic and Business Development

In 2012, Appalachian Power (APCo) ramped up its Economic and Business Development program to promote new growth in its Virginia, West Virginia and Tennessee service territory.

The company's objectives are to:

- Position APCo to secure new industrial and commercial business growth which supports local communities in growing their tax base,
- Support and provide leadership for local, regional and state economic development initiatives,
- Provide leadership for community preparedness activities including site development and certification,
- Improve the educational opportunities and skillset of local economic development professionals,
- Provide assistance to existing industry with plans for expansion,
- Create new, non-retail revenue growth opportunities, and
- Work with legislators to create growth opportunities for our service area.

Success Stories

Since 2012, Appalachian Power and AEP have certified seven Virginia business and industrial sites at various levels in the AEP Qualified Site Program. One of the sites, Greenfield at Botetourt County, was chosen by Eldor Automotive for its first U.S. plant location. Announced in 2016, Eldor Automotive is investing \$75 million in the facility and plans to create 350 jobs. Eldor opened its new plant for production in October of 2018. In addition to the site certification and economic development support, we are building a new electrical substation within the industrial park.

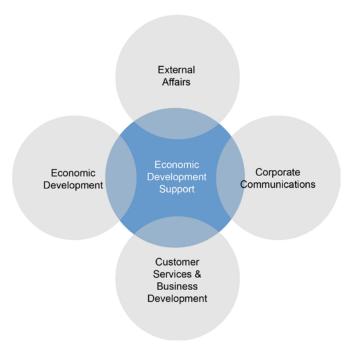
Appalachian Power's economic development team has played a role in 18 major announcements in its Virginia service territory since 2012. These projects represent over \$504 million in capital investment and the creation of over 2,000 direct jobs. The Appalachian Power team works closely with the Virginia Economic Development Partnership (VEDP), along with local and regional partners, to develop and market the region as well as provide guidance and support in closing the deals.

In addition to Eldor Automotive, other notable economic development projects supported by Appalachian Power include Ardagh Group, Deschutes Craft Brewery, Korona Candles, Press Glass and Red Sun Farms.

A complete listing of projects supported by Appalachian Power since 2012 can be found in <u>Appendix B</u>.

Staffing

Appalachian Power has provided a full time professional in economic and business development and added a second full time professional in 2018. The economic and business development team is located within the APCo External Affairs business unit and receives additional support from other internal professional staff. Those include the APCo Customer Services engineering organization, the External Affairs organization and Corporate Communications organization. APCo's senior leadership team fully supports the company's efforts to grow our customer base and maintain vibrant and growing communities in our service area.



EDGE Grant Program

Appalachian Power provides funding and oversight of its own community preparedness grant program, Economic Development Growth Enhancement (EDGE). The program was designed to enhance the competitiveness of APCo communities. It provides funding support to our local and regional economic development partners for strategic planning, business attraction activities, marketing and promotion materials, retention and expansion of existing industry, entrepreneurial development programs, and business park and site development. Since 2014, Appalachian Power has awarded over \$900,000 in grants across its three state service area. Specifically to Virginia, Appalachian has awarded \$461,000 in EDGE grants through 2018. A complete listing of the EDGE Grants can be found in <u>Appendix C</u>.

RFI Support

Appalachian Power is considered a strategic partner with the Commonwealth of Virginia's Virginia Economic Development Partnership (VEDP). Virginia's major utilities, especially the major investor-owned electric utilities, have been involved in economic development promotion since the 1950's. VEDP regularly involves the utilities in RFI's and other development projects because the electric infrastructure is a key part of the evaluation process a company considers when a new investment is being contemplated.

The Commonwealth's regional economic development organizations involve APCo in every RFI or project where electric infrastructure becomes a key factor in the prospect's decision making process. This not only includes the ability to provide adequate capacity for a new company or for an existing company to expand, but also information on specific outage information by circuit and what the possible rate estimate might be based on the client's electric demand and usage.

Appalachian Power for many years has been below the national average in industrial and commercial rate comparisons and provides a distinct advantage for Virginia's response to RFI's.

	Commercial		Industrial				
	2016	2017	2016	2017			
Appalachian Power	8.92	9.01	6.78	6.71			
Dominion Virginia Power	7.60	7.55	6.00	5.99			
Old Dominion Power Company	9.35	9.71	9.33	8.95			
Virginia Average	7.74	7.69	6.36	6.33			
U.S. Average	10.60	10.82	6.80	7.00			

Average Rates (in cents/kilowatt-hour) Comparison of Virginia Investor-Owned Electric Utilities

Source: Edison Electric Institute

The Appalachian Power Customer Services organization and Distribution Asset Planning in Virginia are a critical support team to our economic development efforts. Engineers on that team often accompany our economic development lead to prospect meetings and visits made in Virginia. Valuable information provided to a prospective company includes rate estimates, reliability information, and capacity to serve data. In addition, they serve as a liaison to other critical services provided by our AEP Transmission team to serve new large industrial customers.



Tim Hall, distribution engineering planning and John Smolak, economic and business development, discuss future plans at one of APCo's certified business sites.

Innovative Economic Development Program

APCo has also developed a unique approach to shorten the time frame to provide transmission service to several of Virginia's Mega Business Sites that could serve large customers which have yet to commit to the location. Appalachian and the local community or regional entity that controls the mega site enter into a memorandum of understanding (MOU) which lowers the risk and time to bring in transmission lines and build a substation on the site. The community must front the financial resources for APCo to complete certain stages, such as preliminary line site design and routing, right of way identification, right of way acquisition and final design and construction. APCo agrees to refund the financial resources to complete certain project phases as new electric customers make a commitment to the mega site. The allowable revenue credits per our tariffs for the new load are applied to the balance owed back to the community. Lowering the time needed to complete these large transmission-related tasks provides

assurance to a prospective company that their electric capacity and service needs will be met on time to open their new facility.

Economic Development Rider

To ensure our service area is competitive for new investment projects, Appalachian Power has an SCC-approved Economic Development Rider (EDR) tariff. The tariff is an incentive for new or existing customers that have plans for new investment and job creation and will add 1,000 kW in new demand. The EDR Tariff provides the customer with a minimum of a 25 percent discount on their regulated demand charge for a five year period of time. This allows Virginia to be more competitive for economic development projects and create and retain jobs. Over time APCo has had six major customers that have received the financial benefits of this EDR tariff. The current EDR Tariff has been in place since January of 2015 and it is time to re-evaluate and benchmark the discount with other utilities across the United States.

Economic Development Board Participation

Through participation on boards and councils, Appalachian Power employees provide leadership and support to these local, regional and state economic development organizations:

- Virginia Economic Development Association
- Roanoke Regional Partnership
- Virginia's Industrial Advancement Alliance
- Lynchburg Regional Business Alliance
- Roanoke Industrial Development Corporation
- Danville Industrial Development Corporation
- Onward New River Valley
- Blue Ridge Crossroads Economic Development Authority
- Martinsville-Henry County EDC

Contributions

Appalachian Power contributes financially to many economic and community development organizations throughout its service area. Generally these contributions are unrestricted and are used for a variety of economic development purposes within those organizations. Since 2012 Appalachian Power has contributed over \$300,000 to economic development organizations in Virginia.



AEP Economic Development VP Mark James in discussions with Charlie Jewell, executive director of Onward New River Valley and John Smolak, director of economic development at APCo.

Training

Since 2012, our Virginia economic development team conducted two Economic Development Forums which provided a venue to educate APCo local professionals on our AEP and APCo Programs and sponsored a noted site location consultant to attend the forum. The site location consultants developed specific presentations on the most recent criteria companies use to locate new investments and jobs.

Appalachian Power sponsored a seminar conducted by Carol Johnson of Continuous Dialog in Roanoke for Virginia's state, regional and local organizations. The two-day seminar entitled "Building Competitive Advantages to Win" teaches competitive sales generation best practices. The seminar was attended by approximately 25 participants.

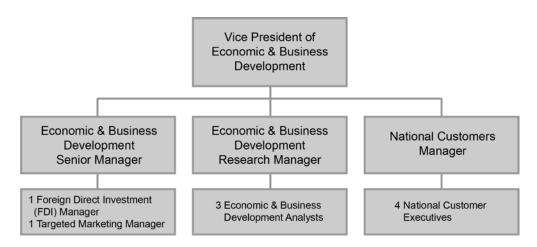
Appalachian also sponsored a specific webinar relating to Business Retention and Expansion best practices conducted by Laith Wardi, president of Executive Pulse, Inc. Approximately 35 Virginia practitioners attended that webinar.

American Electric Power Economic and Business Development

AEP's strategy for a sustainable future is to ensure that the production and delivery of energy enables positive social and economic change for our customers, employees, investors and communities. A key principle in that strategy is helping to build strong local communities. We have a responsibility to create shared value – for our customers, employees and the communities we serve. Our economic development activities seek to enhance and support communities through the expansion of economic opportunity by minimizing unemployment and supporting an adequate tax base for critical community institutions. Additional information on AEP's sustainability goals is available in our Corporate Accountability Report at www.aepsustainability.com.

Staffing

AEP re-instated its corporate focus on economic development in 2012 with the goals of driving revenue growth while also enabling economic growth in our communities. The team is currently comprised of 13 individuals.



AEP's Corporate Economic & Business Development Team Org Chart

The AEP team provides programs and services to support business attraction, retention and expansion, as well as community development, across its service territory. Its program is guided by three key pillars:

- Prospect Development
- Product Development
- Practitioner Development

In addition, the team provides a breadth of research and GIS services that support AEP's corporate and operating company economic development programs, and ultimately the communities we serve.

Prospect Development



We are proactive and intentional in our efforts to attract new business investment from current and prospective customers. AEP's National Customers team manages our relationships with many of our largest customers. The team works closely with these large energy users on future expansion projects and consults on energy solutions and services that can optimize their consumption and costs.

Beyond our current customers, we have a small team at the corporate level that works to proactively identify prospects and manage business relationships with companies in target industry sectors to secure investment in new facilities across the AEP system. Our efforts are global in scope, including pursuing domestic companies as well as attracting foreign direct investment (FDI) to our service territory.

Our team engages with consultants in target markets in Europe, Asia and North America and participates in industry events to identify and meet with prospective companies and intermediaries such as site selection consultants to highlight the advantages of locating in our service territory. Events and associations include SelectUSA, CoreNet Global, the International Asset Management Council, the European American Investment Council, the Site Selectors Guild, the German American Chamber of Commerce, and other target industry specific organizations.

Over the years, we have worked with a number of prospects that have considered or are seriously considering Virginia as a location to set up operation. One notable example of these efforts is a project we identified originally through one of our international consultants. After meeting with the company to discuss their plans to set up their first U.S.-based operation, we later guided company officials through a three-state site visit tour, including visiting sites in APCo service territory in Virginia. After competing vigorously with the Carolinas and Georgia, and after visits to their corporate headquarters with local, regional and state officials, as well as visits to the project site in Virginia by them, the company has indicated plans to move forward sometime in 2019 with their finalist site in Virginia.

We also have a focused effort on building awareness through digital marketing and advertising channels, including our website (<u>www.aeped.com</u>), social media (Twitter and LinkedIn), and pay per click advertising (Google AdWords).

Product Development

Places prepared with development-ready sites win more investment. Through the AEP Quality Sites Program, we partner with communities to provide programming and funding for site evaluation and certification by industry-leading site selection and engineering experts.

In Virginia, these sites have been designated as AEP Quality Sites:

- Certified Industrial Sites (McCallum Sweeney Consulting)
 - New River Valley Commerce Park, Dublin
 - o Wildwood Commerce Park, Hillsville
 - Botetourt Center at Greenfield, Daleville (sold to Eldor Corp.)
- Qualified Data Center Sites (Biggins Lacy Shapiro)
 - Roanoke County Center for Research & Technology, Salem
 - o Progress Park, Wytheville
- Reviewed Sites (Burgess & Niple)
 - o Southern Gap Business Park, Vansant
 - o Brockman Industrial Park, Amherst

In addition to the AEP Quality Sites program, we also offer site development support in the form of funding due diligence studies or site preparation on a case-by-case basis.

Certified Industrial Sites

AEP contracted McCallum Sweeney Consulting to complete the certification on three Virginia sites. McCallum Sweeney was formerly a leading site selection consulting firm whose business closed in the summer of 2018. AEP continues to actively market these three sites, and plans to initiate work with a new site

certification vendor in 2019. The process undertaken by McCallum Sweeney included desktop evaluation, site visit and review of an extensive application to ensure certification criteria were met.

Appalachian Power worked directly with the local economic development partner to prepare and submit the Site Certification Proposal. Among other criteria, the certified site requirements include available developable acreage, minimum excess utility capacities and transportation accessibility. Environmental and geotechnical studies were also completed on each site.

Appalachian Power partnered with Virginia's First Regional Industrial Facility Authority to achieve certification of the New River Valley Commerce Park in Dublin, Pulaski County in June 2015 and with the Blue Ridge Crossroads Economic Development Authority to achieve certification of the Wildwood Commerce Park in Hillsville, Carroll County in February 2016.





The AEP and APCo team onsite in Botetourt County with McCallum Sweeney Consulting.

Botetourt Center at Greenfield Tract 4, located in Botetourt County, Virginia achieved large park certification in October 2015. Appalachian Power partnered with Botetourt County to meet the certification criteria. The certified tract was part of the site selected by Eldor Corporation for its automotive components manufacturing facility.

Qualified Data Center Sites

AEP partnered with Biggins Lacy Shapiro & Company (BLS & Co.) to complete data center site qualification of the Roanoke County Center for Research & Technology and Progress Park in Wythe County. Both sites were originally certified in 2013, and AEP funded renewals in 2016 for the Roanoke site and 2017 for the Progress Park site. BLS & Co. evaluated the sites against a combination of factors desired by mission critical and data center operations, including: water capacity, fiber/broadband connectivity, electric capacity with competitive rates, and locations insulated from manmade and natural risks. A detailed site prospectus was compiled by BLS & Co. for the communities to use as a marketing tool. These detailed reports are available via AEP's website at <u>www.aeped.com</u>.

Reviewed Industrial Sites

AEP engaged the services of Burgess and Niple Engineering to perform assessment of two sites in Virginia in 2017 to determine site readiness. The firm identified strengths and weaknesses, and provided the community a list of action items, or next steps, that need to be accomplished to make the sites more attractive to potential investors. Burgess & Niple provided an assessment of the Southern Gap Business Park, in Vansant and the L. Barnes Brockman, Sr., Business & Industrial Park in Amherst. In addition to the list of action items, a detailed site report was provided to the communities to use for marketing purposes. These detailed reports are available via AEP's website at <u>www.aeped.com</u>.

Practitioner Development

Since 2014, AEP has sponsored 12 web-based economic development training courses for its economic development partners. AEP hosts top industry consultants to present on various economic development topics. All Virginia partners are invited to attend the live webinar sessions and gain access to recordings.

Most recently in August 2018, AEP hosted site selection consulting firm InSite Consulting for a four-part webinar series covering these topics:

- "Introduction to Site Selection and What Clients Expect" where participants learned current trends in site selection and what corporate clients expect from a viable economic development organization.
- "Product Development and RFI Response" where participants learned the client's definition of "ready sites and buildings" and what eliminates communities immediately after their RFI response.
- "Business Retention and Expansion (BRE) Program" where participants learned key tactics to run a successful BRE program.

• "Marketing & Attraction" where participants learned how to effectively position and promote their community through a variety of marketing channels including face-to-face meetings, industry events, websites and social media.

Many of our Virginia partners attended these four sessions. Here is a sampling of feedback provided by them:

- "Great webinar and great information. Very applicable to some site visits I have been a part of and applying principles to improve. Thank you!" Becki O'Quinn, Director of Economic Development, UVA-Wise
- "Great insight from Tonya and Rob!! Definitely found takeaways that we can use in our office to help encourage growth in our Community. Looking forward to the next webinars!" Sarah Johnson, Economic Development Specialist, Campbell County

Prior to 2018, these webinars have been provided by AEP to our partners:

- Two webinars with economic development sales consultant Carol Johnson, "Identifying your Unique Selling Proposition, Differentiate, and Prove It!" and "How to Get in the Door and What to Do Once Inside – Successful Sales Skills for Business Retention & Expansion" (October 2017)
- "Attracting Investment and Employment: Prepared Communities Win" with site selection consulting firm McCallum Sweeney Consulting (September 2017)
- "Easy Opportunities to Improve Your Website" with AEP VP of Economic Development, Mark James (August 2015)
- Four webinars with economic development sales consultant Carol Johnson, "Shortcuts to Survive Site Selection," "Shortcuts to Site Visit Success," "Leading Effective Teams" and "Shortcuts to Presentation Evolution – First to Final Visit" (2014)

Research & GIS Services

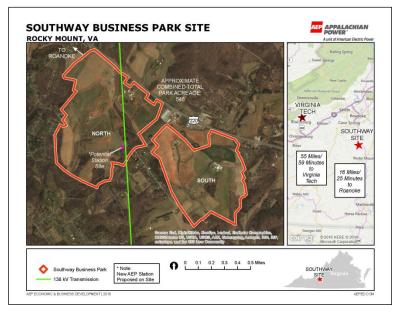
AEP's research team provides information and analysis to help our communities plan and grow. In addition to project-specific, customized research, our capabilities include:

- Community workforce analysis
- Community demographics
- Community comparisons
- Top employers
- Mapping
- Business lists, including high growth companies
- Corporate research
- Economic impact analysis
- Average electric rate comparisons

Our research tools include EMSI, ESRI, D&B Hoovers, Moody's Analytics, IMPLAN, EEI Average Electric Rates and ROI Gazelle.

Requests completed on behalf of Virginia include workforce availability reports, electric rate comparisons, corporate research briefs to support prospect activity and mapping of key business locations for prospects, drive-times/distances and site infrastructure.

We also offer a community profile interactive map for Virginia communities. Available at <u>www.aeped.com/virginia</u>, this resource gives APCo-served communities access to county-level demographic and business data reports.



We provide GIS mapping services to support projects and community development. Above is an example recently completed to support an RFI.

Location One Site & Building Database Subscription

Location One is a national online location analysis tool designed for communities and economic development organizations to promote available site and building inventory. With its integrated GIS component, the tool uses customizable layers with market information, demographics, workforce, infrastructure, housing, business and industry.

AEP uses this site and building database to promote available properties on aeped.com. As of October 4, 2018, AEP had 33 sites and 50 buildings in Virginia in its database.

We also make this tool available at no charge to our communities.

Transmission System Investments

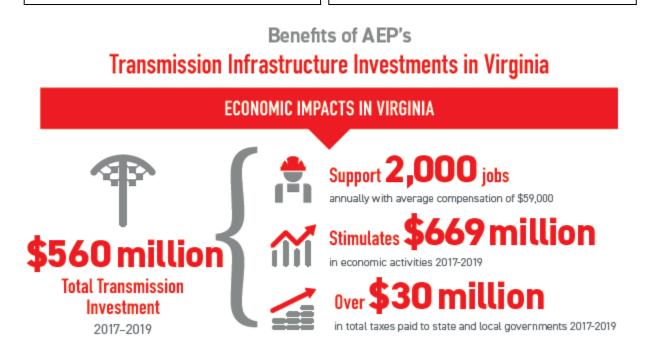
Transmission is part of the national electricity grid, helping ensure the reliable delivery of energy that is vital for life today. It serves the needs of business and industry, helps communities attract large new businesses, enables the efficient integration of renewables, and is an important part of our national security infrastructure. To ensure a reliable, efficient and resilient system, transmission infrastructure must be replaced and improved as it reaches the end of its physical capabilities.

40,000 MILES AEP owns and operates the largest

transmission network in the U.S.

OVER \$2 BILLION

Annual capital investment required just to maintain AEP's current asset age profile



Local reliability to APCo's industrial customer base improves our ability to be attractive to new customers and helps our existing industry expand and grow.

LOCAL RELIABILITY IMPACTS



Efficient Solutions

- Recently completed projects shown to be 97% effective in cutting the duration of customer outages
- New transmission lines are 55% more energy efficient than those being replaced

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Tangible Reliability Improvements

 A sample of line rebuild projects shows an projected 47% reduction in total transmission-related power outages



Resilient New Infrastructure

- Modern engineering standards ensure public safety and protect against severe weather, terrorism, and other threats
- New fiber-optic communications networks expand system automation capabilities and enhance cybersecurity

Here is an example of a new transmission investment in the APCo Virginia footprint:

CLOVERDALE AREA IMPROVEMENTS PROJECT

The project, located in Botetourt County, Virginia, includes construction of a new EHV substation yard, expansions and upgrades to the existing EHV yards at the Cloverdale Substation, and installation of new transmission lines to tie the facilities together. The project addressed voltage and thermal problems, transmission congestion and equipment obsolescence that were identified in the region by PJM, the regional transmission organization.

The project will generate \$900,000 in tax revenue, and according to local news the additional tax revenue provided the county of Botetourt to propose a 1.5% pay raise

and thereby provide more competitive starting salaries for the Sheriff's Department.



BOUNDLESS ENERGY"

Rural Initiatives in the APCo Region

Appalachian Power is strategically developing initiatives to targeted rural areas of our Virginia footprint. We recognize that many of our rural communities are facing economically challenging times to create and retain employment opportunities and attract new investment to stabilize the tax base for essential services and education.

Strategic Workforce Study

Appalachian Power realizes that besides having business site and buildings available for new investment, proving to a prospective industry that a readily available workforce is here to fulfill their needs is just as important. That is why we have embarked upon a project in 2018 which will decidedly give our service area footprint an edge up on the competition. Appalachian Power has partnered with Virginia Tech and the Virginia Tobacco Commission to conduct a unique workforce assessment and skills analysis project.

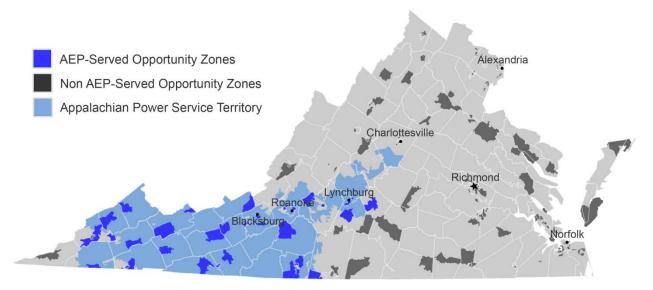
With the assistance of a Special Projects Grant awarded by the Virginia Tobacco Commission with matching funds from Appalachian Power's Economic Development Office and in-kind assistance from Virginia Tech's Economic Development Office, the workforce assessment will begin in 2018 and conclude around midyear 2019.

This Workforce Assessment and Skills Analysis will create a better understanding of the current labor market and ways to improve it, with specific consideration for identifying transferable skills and the training and support programs to enhance those skills. As part of the data analysis, the project will review wage and salary data, available skill sets, commuting patterns, and workforce training offerings in 52 counties and cities encompassing the entire Tobacco Region, as well as additional counties and cities in the Appalachian Power service territory.

The final report will include strategic recommendations for maximizing the assets of this region's workforce and enhancing the skills of displaced workers. Most importantly, local and regional economic development professionals will have access to rich data for marketing their regions as a competitive business location and will receive training in how to most effectively utilize the data generated by the workforce assessment.

Opportunity Zones

Forty-nine of Virginia's 212 new Opportunity Zones intersect Appalachian's service territory. APCo will be evaluating the best way to assist our communities with these new opportunity zones which are tied to new economic growth and investment and private tax incentive opportunities.



Southwest Virginia Initatives

APCo has been a strong supporter of the Southwest Virginia Economic Forums that have been spearheaded by the UVA-Wise Chancellor's Office and its Economic Development Department. This initiative was started to look at the SW Region of Virginia with an eye to the future for a diversified economy.

The Southwest Virginia Region has been dependent on coal's natural resources to maintain many jobs and its economic base. The coal industry has suffered a tremendous loss of coal production and jobs over the last several years. The SWVA Economic Forums have begun to unify the region to reinvent itself and embrace the change as an opportunity for innovation and new economic opportunities. UVA-Wise has been the force behind many local committee structures addressing opportunities in attracting new technology industries, increased development of hospitality and tourism opportunities, small business entrepreneurship and advanced manufacturing growth. Appalachian Power plans to continue our advisory role to the region and financially support future SWVA Economic Forums and related activities.

Aerospace Industry Opportunities

In keeping with creating new opportunities to assist our rural regions of Virginia, APCo is hoping to connect our workforce skills assessment study with investment and job opportunities in the aerospace industry. A similar workforce study conducted by APCo's sister company in eastern Kentucky identified a strong connection of the transferable skill sets of the coal mining industry to aerospace product skills. Those aerospace skill sets are dependent on metal working, welding skills, electrical skills and metal fabrication technologies.

With the right information and data on those transferable skills, APCo will to embark upon a project to market the southwestern region of our footprint to the aerospace industry and all the related aerospace suppliers which manufacture components and parts for the aerospace first tier OEM industry.

Appalachian Power realizes that building on the strengths of the existing workforce and the skills handed down from generation to generation can jumpstart a new diversified economy.

Rural Broadband Strategic Initiatives

While lack of adequate infrastructure such as electricity, natural gas, water and wastewater have kept sites from landing prospects in the past, industries and their use of technology have added broadband infrastructure to that list. Today, broadband connectivity is considered as critical a piece of infrastructure as traditional utilities have been in the past. The Virginia Economic Development Partnership and the Virginia Chamber of Commerce have both reported that better digital infrastructure is a Top 5 focus of both organizations in an attempt to make Virginia a better place to do business. Today, access to broadband internet is expected.

Additionally, people want to live where there is reliable broadband service. It has become an essential amenity not only for delivery of healthcare, education and other public services, but also for entertainment and communications as well. Site selectors expect broadband. A company is more likely to require a direct fiber connection and redundancy than not. Just like the electric industry, reliability is heavily scrutinized to ensure that the operation will not be offline. It's no secret that there is a "digital divide" in Virginia and the "have nots" largely fall in Appalachian Power's service territory. While we have developed sites in place, they can quickly be passed over for any projects that require reliable internet service. If a community is lacking broadband service, it is almost always crossed off the list of decision makers.

Through the Grid Modernization and Security Act, the Virginia General Assembly has asked Appalachian Power to investigate the feasibility of utilizing its dark fiber to be a part of the broadband solution. Appalachian Power did not take this lightly and quickly put together a large team across all departments to initiate this process and to deliver a feasibility study. Appalachian Power will provide an in-depth look at the possibility of being a middle-mile solution for unserved areas in our territory and action items that will be required to start the process.

Recommendations

Strategic Infrastructure Development

In order for the Commonwealth of Virginia to become more competitive for new capital investment and job creation, we must allocate additional financial resources into electric infrastructure to make industrial sites ready for business.

The current policy dictates that the cost of electric infrastructure for economic development purposes can be recovered if there is an end user (a business) requesting new service. Virginia needs to be more aggressive in making industrial sites "ready" for industry. APCo has been a member of the Virginia Economic Development Partnership's Site Readiness Committee since its inception and has helped craft appropriate guidelines for new site development, appropriate infrastructure and utility capacities desired by companies.

We recommend that Appalachian Power be allowed full cost recovery of new infrastructure to serve industrial or business sites without an immediate customer request. We suggest an annual allocation of \$25 million in electric infrastructure expenditures for economic development be allowed for this purpose.

Strategic Economic Development Initiatives

It is time for Appalachian Power to take our economic development program activities to a new level of commitment. In order to accomplish that step it will take a partnership with the VA-SCC, our customers and Appalachian's shareholders.

Much more can be done to advance business park development with our communities that we serve – this would include pad-ready site development and the construction of speculative buildings to market. More can be accomplished in developing a workforce targeted to the industry sectors in our footprint – this would include a periodic analysis of the workforce skills and future workforce needs. More can be done to promote our service area for new investment in partnerships with our APCo communities and the Virginia Economic Development Partnership team.

In order to accomplish this initiative we are suggesting that the VA-SCC approve either a \$0.25 monthly charge to each customer bill or a \$1.00 charge for each Commercial and Industrial customer meter, which would be matched by company funds to fund these activities. An annual plan and report would be submitted to the VA-SCC for review.

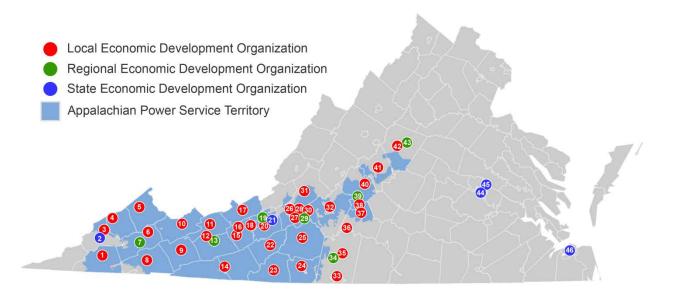
Economic Development Special Contracts

Attracting larger capital investment projects and large job-creating projects to our service area footprint would help to address the concern of a flat line growth model. Generally speaking, large capital investment and job creation projects are more electric energy intensive in nature. Also these types of investments are extremely competitive in nature with usually several states vying to land such a project and Virginia must become more competitive.

APCo recommends that it be given the permission to negotiate a competitive special contract for new and existing business/industrial customers that meet or exceed 5 Mega Watts (MW) of required energy capacity. The current ability of APCo customers that exceed 5 MW of capacity to shop for alternative providers has eliminated APCo industrial customers and will become detrimental to customer rates in the long term.

Appendix

Appendix A: Local and Regional Partner Map



Map # Organization Name

- 1 Scott County
- 2 University of Virginia at Wise
- 3 Wise County IDA
- 4 Dickenson County IDA
- 5 Buchanan County IDA
- 6 Russell County IDA
- 7 Virginia Coalfield EDA
- 8 Washington County EDA
- 9 Smyth County ED
- 10 Tazewell County
- 11 Bland County
- 12 Joint IDA of Wythe County
- 13 VIA Alliance
- 14 Blue Ridge Crossroads EDA
- 15 Pulaski County
- 16 Town of Pulaski ED
- 17 Giles County
- 18 City of Radford
- 19 Onward New River Valley
- 20 Montgomery County ED
- 21 Virginia Tech
- 22 Floyd County ED
- 23 Patrick County

Map # Organization Name

- 24 Martinsville-Henry County EDC
- 25 Franklin County
- 26 City of Salem
- 27 City of Roanoke
- 28 Roanoke County
- 29 Roanoke Reg. Partnership
- 30 Town of Vinton
- 31 Botetourt County
- 32 Bedford County
- 33 City of Danville
- 34 Southern Virginia Reg. Alliance
- 35 Pittsylvania County
- 36 Town of Altavista ED
- 37 Campbell County ED
- 38 City of Lynchburg
- 39 Lynchburg Regional Business Alliance
- 40 Amherst County EDA
- 41 Nelson County EDA
- 42 Albemarle County
- 43 Central Virginia Partnership for Econ. Dev.
- 44 Virginia ED Partnership
- 45 Virginia Tobacco Commission
- 46 Virginia Port Authority

Appendix B: Economic Development Projects in Virginia Supported by Appalachian Power Since 2012

Year Announced	Company / Project	Location	Product	Direct Jobs	Customer Investment
2012	Vaughan-Bassett Furniture	Galax, VA	Bedroom Furniture	115	\$8,000,000
2013	Canline Systems	Pulaski County, VA	Conveyer Systems	25	\$1,000,000
2013	Ardagh Group (Project Kobalt)	Roanoke County, VA	Food and Beverage Containers	96	\$94,000,000
2013	Korona S.A. (Project Wax)	Pulaski County, VA	Manf - Candle / wax products	112	\$18,300,000
2013	Falls Stamping (Project Stamping)	Pulaski, VA	Truck Parts	112	\$5,700,000
2013	Red Sun Farms (Project Greenhouse)	Pulaski County, VA	Agricultural - Food Processing	205	\$30,000,000
2014	Dynax America Corporation	Botetourt County, VA	Automotive Components	75	\$32,600,000
2014	Hanwah Azdel	Lynchburg, VA	Thermal Plastic Composites	33	\$21,300,000
2014	RICK USA (Project PUC)	Pulaski County, VA	Stamping Parts for Candle Industry	10	\$1,000,000
2014	Mayville Engineering (Project Castaway)	Smyth County, VA	Gas Tanks and Air Tanks for Volvo	160	\$10,000,000
2015	Evermark, LLC	Smyth County, VA	Wood Products	130	\$12,000,000
2015	Trinity Packaging	Rocky Mount, VA	Plastic Packaging	20	\$5,000,000
2016	Ballast Point (Project Skipjack)	Botetourt County, VA	Craft Brewery	175	\$48,000,000
2016	Deschutes Brewery (Project Bravo IV)	Roanoke, VA	Craft Brewery	108	\$85,000,000
2016	Eldor Automotive (Project GO)	Botetourt County, VA	Automotive Components	350	\$75,000,000
2017	HUMM Kombucha (Project Music)	Roanoke, VA	Fermented Kombucha Tea	50	\$10,000,000
2018	Interstate Group, LLC (Project Hokies)	Glen Lyn, VA	Utility Trailers	83	\$4,100,000
2018	Press Glass (Project Sand)	Henry County, VA	Glass for Windows	212	\$43,550,000
				2,071	\$504,550,000

Appendix C: APCo EDGE Grant Recipients in Virginia, 2014 - 2018

Year 2018 - \$148,000

- \$20,000 to the Lynchburg Regional Business Alliance for a comprehensive marketing strategy to sell and repurpose the existing TEVA Pharmaceutical facility located in Forest, VA.
- \$20,000 to the Floyd County Economic Development Authority to enhance its branding and marketing program, including a new website for its industrial properties and new shell building.
- \$15,000 to Botetourt County Economic Development Department's efforts to develop a new marketing platform with branding, marketing materials and website.
- \$15,000 to the Western Virginia Regional Industrial Facility Authority, a multijurisdictional development authority for a marketing program to include detailed site renderings, branding, drone video photography for the new 130 acre industrial park in Roanoke County currently referred to as the Woodhaven Site.
- \$15,000 to the Campbell County Economic Development Authority to support their development of a new speculative industrial shell building in Rustburg, VA.
- \$15,000 to Onward New River Valley Economic Development to develop a balanced marketing strategy with direct marketing to site selection consultants and new available site videos for their regional jurisdictions.
- \$10,000 to the Southwest Virginia Alliance for Manufacturing for the promotion of manufacturing in southwest Virginia with new video production and enhanced equipment for industry tours for students and potential workforce.
- \$10,000 to Nelson County's Economic Development Department to enhance their county-wide economic development marketing plan with a new stand-alone website;
- \$10,000 to the Joint IDA of Wythe County to enhance and improve their website content materials, videos of industrial properties and other marketing materials.
- \$10,000 to Virginias First Regional Industrial Facilities Authority, a partnership of eleven jurisdictions, for enhanced marketing materials, video production services and site location partnership services for the New River Commerce Park.
- \$7,000 to the City of Lynchburg Economic Development Department to aid in development of engineering drawings and site renderings for two industrial park sites located in the city of Lynchburg.
- \$1,000 to Amherst County Economic Development Authority to enhance their marketing, photos and renderings of Amelon Commerce Center in Madison Heights, VA.

Year 2017 - \$53,000

- \$20,000 to The Martinsville Henry County Economic Development Corporation who will develop comprehensive marketing materials for the Commonwealth Crossing Industrial Park and the Commonwealth Centre for Advanced Training (CCAT).
- \$15,000 to Roanoke County Economic Development Department will contract for a complete redesign of their website with updated demographic and community

information and site and building information which will be deployed on digital platforms, and be interactive and mobile friendly to users.

- \$6,000 to Amherst County Economic Development Department will develop six (6) conceptual site plans for potential development sites, including one pad ready site, in Amelon Commerce Center and the Zane Sneed Industrial Park.
- \$7,000 to the Blue Ridge Crossroads Economic Development Authority will develop and implement a new marketing plan for the Wildwood Commerce Park, which is an AEP certified site.
- \$5,000 to Virginia's First Regional Industrial Facility Authority will enhance the existing marketing plan for the New River Commerce Park, which is an AEP certified site. The plans include a revised master plan, marketing materials, flyers and attending various site selection consultant events.

Year 2016 - \$ 75,000

- \$20,000 to the Western Virginia Regional Industrial Facility Authority for site planning and environmental assessments on a new 130 acre industrial park in Roanoke County currently referred to as the Woodhaven site.
- \$10,000 to assist the Lynchburg Regional Business Alliance with a comprehensive workforce analysis for the Lynchburg Regional MSA.
- \$10,000 to help the Virginia aCorridor Regional Authority enhance its branding and marketing of commercial and industrial properties.
- \$15,000 for the New River Valley Economic Development Alliance to develop a balanced marketing strategy for its 15 local partners.
- \$10,000 to support the Roanoke County Economic Development Department's efforts to develop a virtual study and grading package for a 57 acre site located in the County's Center for Research and Technology.
- \$5,000 to Nelson County's Economic Development Department to fund a county-wide economic development marketing plan that focuses on the Route 29 Corridor.
- \$5,000 to the City of Lynchburg Economic Development Department to aid in development of a pilot TechHire program that will target and develop the unemployed and underemployed for job opportunities in health care, technology and advanced manufacturing.

Year 2015 - \$65,000

- \$20,000 to the Franklin County EDC for geotechnical and environmental reviews on their new 500 acre industrial and business park located on RT 220.
- \$15,000 to the Washington County Department of Economic and Community Relations to launch a new branding and marketing campaign to promote the county's economic development strategic plan and business parks.
- \$15,000 to the Amherst County Economic Development Authority for a new strategic plan in economic development to deal with several job losses, company and institution downsizings and company closures.

- \$10,000 to the City of Roanoke Office of Economic Development to develop a new professional economic development video to promote the city's assets and business parks.
- \$5,000 to the Blue Ridge Crossroads Economic Development Authority to develop a new marketing strategy to promote the new Wildwood Commerce Park, an AEP Certified Site.

Year 2014 - \$120,000

- \$20,000 to the City of Roanoke Office of Economic Development for the development of a new standalone website to promote the city's assets and business parks.
- \$20,000 to the New River Valley ED Alliance to develop a strategic plan for the region and next steps for a revised marketing initiative.
- \$20,000 to the Region 2000 Alliance in Lynchburg to develop a new website and marketing strategy for the entire region.
- \$20,000 to the City of Lynchburg's Economic Development Office for a comprehensive plan to address their marketing materials, new website and videos.
- \$20,000 to the Botetourt County Economic Development Office to build its first website dedicated to their economic development marketing strategy.
- \$20,000 to the Blue Ridge Crossroads Economic Development Authority for a comprehensive marketing plan to promote the new Wildwood Commerce Park.