

Authorization of Public-Private Partnership (Utility System Agreement) – Appalachian State University

ISSUE OVERVIEW

The Appalachian State University Board of Trustees requests authorization to enter into a long-term utility agreement with a public private partner for a new district energy system (DES) to support the development of the Innovation District.

Upon approval, App State will enter a public-private partnership (P3) agreement with Harrison Street Real Estate, LLC to form a special purpose entity (“Service Provider”) for the development, construction, and operation of a net-zero carbon district energy system (DES) and related infrastructure to serve the Innovation District. The DES is required for the generation and distribution of energy to support the planned buildings on the Innovation District, including the Conservatory for Biodiversity Education and Research (CBEaR) and faculty and staff multi-family housing. The DES will include development of a district energy system based on renewable and sustainable clean energy sources that include the following:

- renewable electricity, including wind and solar;
- thermal heating and cooling, including geothermal heat pumps and wastewater heat recovery tanks;
- and a central plant to manage the distribution and supply of heating and cooling within the Innovation District.

App State will enter into a long-term service agreement with the service provider for a term not to exceed 50 years to purchase energy services for the Innovation District for a fixed monthly fee. The monthly fee will include two components: (1) heating and cooling capabilities from the DES including the central plant for the full 50-year term, and (2) renewable electricity, effective for the useful life of the renewable electricity assets. The monthly utility fee will be fixed, with an adjustment indexed to the consumer price index (CPI). The monthly utility fee may also be adjusted periodically for additional project improvements or replacement of renewable energy assets at the end of their useful life. A summary of the material terms is provided on the term sheet. Any material changes to the terms will require approval by the Board of Governors.

In September 2015, the University of North Carolina Board of Governors approved the expansion of App State’s millennial campus designation to include approximately 77 acres at the former Broyhill Conference Center, which includes the Innovation District. The Innovation District will include academic facilities, faculty and staff housing, and a new district energy system. The first academic building, the Conservatory for Biodiversity Education and Academic Research (CBEaR), will be a 50,000 square foot teaching and research facility which will be completed by Fall 2025. The 2021 Appropriations Act (S.L. 2021-180) appropriated \$54 million for the Innovation District which will fund the new academic building. Future phases would add two additional academic buildings.

The development of a DES is required to support the development of the Innovation District. The DES will be developed in conjunction with the new academic building and faculty and staff housing.

The App State Board of Trustees approved the P3 agreements on June 17, 2022.

RECOMMENDATION

It is recommended that the Board of Governors approve this request.

Appalachian State University
Innovation District P3 Term Sheets
January 2023

Public-Private Partnership for a District Energy System

Appalachian State University (“Appalachian”) is requesting authority to negotiate and enter into a Long-Term Utility Agreement to facilitate the development, construction, and operations of a net-zero carbon district energy system and related infrastructure, as described herein, to serve the Innovation District, on substantially the terms set forth in this Term Sheet.

I. Project Overview	
1. Project	<p>Harrison Street Real Estate, LLC (“HS”) will form a special purpose entity, (the “Service Provider”) to develop, design, build, finance, operate and maintain utility systems which is expected to include the following initial components (collectively, the “Initial Innovation District Utility System”) which are located at Appalachian’s Innovation District:</p> <ul style="list-style-type: none"> • Renewable Electricity <ul style="list-style-type: none"> ○ Wind: [4]MW of on-site wind power comprised of [two] [1.5]MW+ wind turbine generators ○ Solar: [120]kW-dc of rooftop solar • Thermal Heating & Cooling <ul style="list-style-type: none"> ○ Geothermal heat pumps with [9,680] kBtu/hr of peak heating capacity and [1,314] tons of peak cooling capacity ○ Wastewater heat recovery tank capacity of [6,700] gallons • Central plant to manage the distribution and supply of heating and cooling, and electricity within the Innovation District. <p>System capacity and configuration is subject to change based on the detailed design process and the incorporation of building energy use intensity estimates. The Initial Innovation District Utility System shall be designed such that it is reasonably flexible to add additional electricity generation, thermal generation, and/or electricity and thermal storage with the same or alternative clean technologies.</p>
2. Project Participants	<p>The Service Provider will be a to-be-created affiliate of HS which develops, finances, owns, operates, and manages energy infrastructure assets including district energy systems under public-private-partnerships (“P3s”) with higher education institutions.</p> <p>The Service Provider’s project team, including designers, contractors, engineers, and consultants, is intended to consist of the following firms:</p> <ul style="list-style-type: none"> - Development Manager: Radnor Property Group - Geothermal, Solar, and MEP Design Engineer: Salas O’Brien - Electrical and Wind Design Engineer: Faith Technologies - Owner’s Engineer: Stanley Consultants - Operator: TBD

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II. Long-Term Utility Agreement	
3. Long-Term Utility Agreement	<p>A Long-Term Utility Agreement will be entered into between Appalachian and Service Provider at closing. Under the Long-Term Utility Agreement, the Service Provider will develop, design, build, finance, operate, and maintain the Innovation District Utility System for the term of the agreement in exchange for a Monthly Utility Fee (defined below) paid by Appalachian.</p> <p>“Innovation District Utility System” means the personal property, improvements, fixtures, and equipment to be operated by the Service Provider in order to provide utility services to the Innovation District, including (i) the Initial Innovation District Utility System and (ii) any additional utility facilities operated by the Service Provider pursuant to the Long-Term Utility Agreement in order to provide the utility services to the Innovation District.</p> <p>The Long-Term Utility Agreement will include mechanisms for the expansion, modification, and renewal of the Innovation District Utility System over the term of the agreement.</p>
4. Financing	<p>The Service Provider will fund the costs to design and construct the Innovation District Utility System through a combination of debt and equity using a project finance structure.</p> <p>Appalachian shall not be obligated or liable, either directly or indirectly, for any financial or other obligation of Service Provider under the project finance documents including without limitation, the payment of any portion of the principal of, interest on, or prepayment premium, if any, of the project debt. Appalachian will not guarantee or otherwise be obligated to financially support Service Provider’s debt repayment obligations.</p>
5. Term	<p>The Long-Term Utility Agreement will remain in effect through but excluding the 50th anniversary of the initial commercial operation date.</p>
6. Monthly Utility Fee	<p>Appalachian will purchase “energy services” (including energy outputs) from the Service Provider under a fixed monthly fee (indexed to CPI) (the “Monthly Utility Fee”). The Monthly Utility Fee will be sized at closing to provide Appalachian with predictability in annual budgeting and allow for recovery of the Service Provider’s expected costs of operating the Innovation District Utility System for the term of the Long-Term Utility Agreement (including opex, third-party service contracts, maintenance costs, financing, and capital recovery). The Monthly Utility Fee may be adjusted from time to time due to an addition to the project improvements or replacement of the initial renewable energy assets at the end of their useful life, as approved by Appalachian.</p> <p>The Monthly Utility Fee for the Initial Innovation District Utility System will be bifurcated into two components:</p> <ul style="list-style-type: none"> • One component attributable to the heating and cooling portion of the system (including within the central plant), effective for the full 50-year term • A second component attributable to the renewable electricity portion of the system, effective for the useful life of the initial renewable electricity assets (to be confirmed by the independent engineer).

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7. Purchase Option	Appalachian will have the right to purchase all of the Service Provider's rights, title and interest in the Innovation District Utility System and the Additional Utility Service upgrades, if any, at any time after the later to occur of (x) the date on which the Service Provider has fully realized the value of all Financial Incentives available in connection with the Innovation District Utility System and the Additional Utility Service upgrades and (y) the 20th anniversary of the initial commercial operation date.
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RESOLUTION OF THE BOARD OF GOVERNORS OF THE UNIVERSITY OF NORTH CAROLINA DELEGATING THE AUTHORITY TO APPALACHIAN STATE UNIVERSITY TO ENTER INTO A LONG-TERM UTILITY AGREEMENT AND RELATED AGREEMENTS WITH HARRISON STREET REAL ESTATE CAPITAL, LLC FOR THE DEVELOPMENT OF A DISTRICT ENERGY SYSTEM DESCRIBED HEREIN AS PART OF PHASE ONE OF APPALACHIAN'S INNOVATION DISTRICT

WHEREAS, by Chapter 116 of the General Statutes of North Carolina (the "Act"), the Board of Governors of The University of North Carolina (the "UNC Board of Governors") is vested with general control and supervision of the constituent institutions, as defined in the Act, which includes Appalachian State University ("Appalachian"); and

WHEREAS, the UNC Board of Governors is authorized under G.S.116-198.34 to (1) designate real property held by a constituent institution as a "Millennial Campus" of the institution, (2) provide for the acquisition and construction of projects located on the Millennial Campus, and (3) enter into contracts and agreements related to the acquisition and construction of such projects; and

WHEREAS, at the request of the Board of Trustees of Appalachian (the "Appalachian Board"), and in accordance with N.C. Gen. Stat. § 116-198.34(8b), the UNC Board of Governors previously designated a portion of Appalachian's campus as a Millennial Campus to facilitate the development of an innovation district ("Innovation District Project Site"); and

WHEREAS, Phase 1 of the Innovation District Project Site will include a Conservatory for Biodiversity Education and Research ("CBEaR"), faculty and staff housing facilities and related surface parking (the "Housing Project"), and a net zero-carbon, renewable and resilient district energy system, utilizing proven technologies in innovative configuration (the "DES Project"); and

WHEREAS, the North Carolina General Assembly appropriated funds to Appalachian during the 2021-2022 legislative session for use in the construction of the CBEaR; and

WHEREAS, Appalachian conducted a competitive selection process which included a request for qualifications followed by requests for proposals to solicit public-private partnership proposals for Housing Project and the DES Project (collectively, the "Innovation District Project") and has selected Radnor Property Group ("Radnor") and Harrison Street Real Estate Capital LLC ("Harrison Street") (collectively the "Development Team") to deliver Phase 1, with Radnor being responsible for delivering the Housing Project and Harrison Street being responsible for delivering the DES Project; and

WHEREAS, the CBEaR will be developed by Appalachian with State-appropriated funds, and

WHEREAS, the Housing Project will be developed by Radnor using private funds under a financing structure whereby Appalachian will not be liable or responsible in any manner for the debt incurred by Radnor to develop the Housing Project; and

WHEREAS, Appalachian has determined that the Phase 1 Improvements, specifically the district energy system component, will serve the strategic needs of Appalachian by assisting Appalachian with achieving objectives contained in its Climate Action Plan, as well as climate action initiatives in the broader Town of Boone and Watauga County area; and

WHEREAS, Appalachian has determined that the Phase 1 Improvements, specifically the district energy system component, are necessary for enhancing its research, teaching, and service missions, as well as enhancing the economic development of the region served by Appalachian by promoting the health and general welfare of the residents of the region served by Appalachian and the creation of jobs, commerce, industry, and additional housing for the Town of Boone and Watauga County and their respective residents; and

WHEREAS, Appalachian is unwilling and unable to incur any debt for the Housing Project and DES Project, which are integral and critical to the Innovation District Project, and therefore has asked Harrison Street to develop the DES Project and to provide financing or arrange financing for the DES Project under a financing structure wherein Appalachian will not be liable or responsible in any manner for the debt incurred by Harrison Street to develop the DES Project; and

WHEREAS, Appalachian now seeks authorization from the UNC Board of Governors for the authorization of certain Appalachian officials to (1) enter into a Long-Term Utility Agreement with Harrison Street for the development, design, building, financing, maintenance, and operation of the DES Project; and (2) enter into those agreements anticipated by the Long-Term Utility Agreement that are necessary to bring Phase 1 of the Innovation District Project, including the DES Project, and other related improvements to completion; and

WHEREAS, THE FOREGOING RECITALS ARE HEREBY INCORPORATED INTO THE BODY OF THE RESOLUTION BY REFERENCE HERETO.

NOW, THEREFORE, BE IT RESOLVED by the UNC Board of Governors as follows:

Section 1. **Authorization of a Long-Term Utility Agreement.** The authority to enter into a Long-Term Utility Agreement, pursuant to which Harrison Street will develop, design, build, finance, operate, and maintain the DES Project for the term of the agreement in exchange for a monthly utility fee to be paid by Appalachian is hereby delegated to the Chancellor of Appalachian, or the Chancellor's Authorized Officer. The form and content of such Long-Term Utility Agreement shall be consistent with the material terms and provisions of the term sheet made available to the UNC Board of Governors and shall be in a form acceptable to the Authorized Officer executing the Long-Term Utility Agreement.

Section 2. **General Authorization.** Appalachian, by and through its Authorized Officer, is hereby delegated the authority, to enter into those agreements anticipated by the ground lease agreement that are necessary for financial closure of the DES Project and to bring the DES Project to completion.

Section 3. **Conflicting Provisions.** All resolutions or parts thereof of the Board of Governors in conflict with the provisions herein contained are, to the extent of such conflict, hereby superseded and repealed.

Section 4. **No Indebtedness.** Nothing in this resolution shall be construed to create any obligation, or liability of Appalachian in any respect whatsoever arising out of or pertaining to the financing or pertaining to the acquisition, development, construction, and operation of the DES Project, and the payment of costs incurred in connection therewith. No statement, representation, or recital herein shall be deemed to constitute a legal conclusion or determination that any particular action or proposed action is required, authorized, or permitted under the laws of the State or any other state, or the United States. The DES Project financing will not constitute an indebtedness or pledge of Appalachian, The University of North Carolina, or the State of North Carolina within the meaning of any constitutional or statutory provision, and the owners of the DES Project will not be paid in whole or in part out of any funds raised or to be raised by taxation or any other revenues of Appalachian.

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Section 5. ***Material Modifications.*** Notwithstanding any of the foregoing provisions of this Resolution, and as provided by UNC Policy 600.1.6, any material modifications or amendments to the Innovation District Project, including the public-private partnership agreement(s), and the underlying Long-Term Utility Agreement shall require prior review and approval of the UNC Board of Governors.

Section 6. ***Effective Date.*** This Resolution is effective immediately on the date of its adoption.

PASSED, ADOPTED, AND APPROVED this the ___ day of January 2023.