UAB DRAFT ENERGY POLICY

Staff Analysis

Item #180475

October 27, 2020

Section 1.0

THE BUILT ENVIRONMENT

1.1 Utility Efficiency Programs

1.1.1 Residential

Background: The efficient use of our natural resources is a primary goal for The City of Gainesville. Better service while minimizing consumption of critical resources benefits all concerned. Goals should be transparent and easy to measure.

Goal: Residential electricity, water and natural gas consumption should be reduced through efficiency measures. These goals should be measured as the average residential account for the utility for each one of these services.

Policy: GRU shall continue to evaluate and support residential efficiency programs for new construction and existing housing.

Staff Analysis:

Customer Support Services

Several programs currently available for residential customers:

1. Natural Gas Rebates
2. Education
    a. Free energy/water surveys
    b. Online Energy Advisor Tool
    c. Tools for Tenants – online resource for renters
    d. Others
3. LEEPplus – Help for low income home owners
4. Solar Net Metering
5. Duct Leak Testing

Existing and any new programs must meet Rate Impact Measure (RIM) test standards as these programs don't cost anything for customers who don't directly participate in them (avoids rate pressure.) Past programs used Total Resource Cost (TRC) test and caused substantial electric rate pressure.

Water/Wastewater

GRU currently measures average residential water usage (per capita) and compares to previous years. Need to determine a consistent measurement (e.g. per capital usage, per connection usage). The challenge is to identify specific drivers that cause increased or decreased usage.

Energy Delivery

Power Transmission: As the popularity of renewable energy broadens by the day, GRU is investing well beyond repairing and replacing our graying infrastructure as we scramble to link and balance renewable energy sources to our grid.
Power Distribution: GRU Energy Delivery Has areas of high DER penetrations thus we are facing an immediate need to modernize the grid as we grapple with a customer base increasingly empowered by renewable energy.

Infrastructure capacity improvements needed for the described efficiency programs in T&D would not be cost-effective with significant reductions in residential electric & gas consumption.

Energy Supply

As in our past conservation programs that reduced 36 MW of load, these type of well-intended load reductions will spread our fixed cost of service over less MW's, resulting in base rate impacts.

Community Relations

CR would continue to host GRU in the Neighborhood to educate customers on ways to be in control of utility bill, regardless of rates.

1.1.2 Commercial, Institutional, Industrial

Background: The City of Gainesville has educational utility efficiency programs for commercial and institutional GRU customers.

Goal: To increase the efficiency of the delivery and consumption of resources. These programs must maintain GRU's safety, service levels, and fiscal responsibility while also encouraging the success of commercial customers.

Policy: GRU shall continue to evaluate and support commercial and industrial efficiency programs.

Staff Analysis:

Customer Support Services

A few programs currently exist for Commercial, Institutional and Industrial customers, focusing on Solar Net Metering, several analysis services and/or products, and a key account rep assigned to each large customer as a single point of contact for all their needs.

We are always evaluating new programs and ideas to offer our customers, but they must be able to meet the RIM test to avoid upward rate pressure.

Water/Wastewater

GRU encourages water efficiency improvements to reduce water usage specifically through education and outreach, but does not currently have money budgeted for rebates or fixture change-outs, etc.

GRU has reclaimed water in defined areas to offset potable irrigation and cooling water. Facilities are being expanded along with emphasis on building recharge wetlands.

GRU doesn't manage internal graywater systems. There are multiple regulatory hurdles that would make it cost-prohibitive. (Small offset of potable water at significant cost.)

Energy Delivery

Increased use of energy efficient technology such as variable speed drives (VSD's) can cause Voltage Total Harmonic Distortion (VTHD), voltage and current transients, harmonic currents and power factor effects requiring filters and correction devices be installed (at GRU expense?). VSD's are also more susceptible to tripping offline due to capacitor switching transients and voltage sags. This could cause disruptions to customers' processes and hinder normal operation of grid devices used for voltage and power factor control.

Energy Supply

Same impacts as residential.

1.2 City Incentives

1.2.1 Minimum Efficiency Standards for Rental Properties

Background: The existing housing stock in Gainesville is substandard and does not allow for the efficient use of resources. This adversely and disproportionately impacts the most vulnerable GRU customers.

Goal: Rental properties should meet a measurable minimum standard of efficiency for water and energy consumption.

Policy: The City shall require that rental housing meet a minimum standard of safety, efficiency, and comfort.

Staff Analysis:

Customer Support Services

Have provided subject matter expertise in previous conversations on this topic. Involves staff time.

Water/Wastewater

Only concern is who is responsible for confirming the upgrades are made and meet the efficiency standard? The water department would require additional FTEs and funds to support this activity, if required of our staff.

Energy Delivery

Infrastructure capacity improvements would not be cost-effective with significant reductions in residential electric & gas consumption.

Energy Supply

Same impacts as residential.

Community Relations

CR would seek to serve on any committee, advisory team, etc. that would address this issue.

1.2.2 Code Enforcement New Construction

Background: City building officials work to ensure that structures conform to the plans submitted for review during the permitting process. However, many structures in GRU's service territory but do not conform to all aspects of the existing building codes.

Goal: To have more efficient new construction.

Policy: The City of Gainesville will require new construction to meet Florida Building Code standards.

Staff Analysis:

Energy Delivery

Minimal – ED staff would have to become well-versed in any new building code standards.

1.2.3 HVAC Design Standards

Background: The efficiency of HVAC systems is dependent on proper sizing of equipment, and the size of equipment may change as buildings change use, change configuration, or are upgraded in any way.

Goal: To increase the efficiency of HVAC systems across GRU's service territory.

Policy: As required by the Florida Building Code, a Manual N (or Manual J&D as required by code) should be provided by a third-party engineer, independent of the HVAC installer, prior to the bidding or selection of new or replacement HVAC equipment on municipal buildings.

Staff Analysis:

Minimal impact to operations, other than the known issue of reduced consumption creating upward rate pressure.

1.2.4 Financing Efficiency and Livability Projects

Background: The City of Gainesville has been a leader in creating and supporting energy-efficiency improvements regardless of requirements by the State of Florida.

Goal: The City of Gainesville desires to continue as a leader in energy-efficient improvements.

Policy: The City of Gainesville shall participate with government agencies and non-government entities who provide capital for energy-efficiency improvement programs within its service area, subject to maintaining a neutral financial impact on non-participating GRU customers. GRU will offer on-bill repayment programs in order to facilitate and encourage energy-efficiency improvement programs offered by third parties.

Staff Analysis:

Customer Support Services

Would necessitate writing requirements into new billing system upgrade. Newer systems already have these capabilities so it shouldn't be a problem.

Energy Delivery

The design of any new or modified energy-consuming devices that might be part of an energy efficiency improvement program would have to be reviewed by ED Electrical or Gas Engineering.

Energy Supply

Minimal impact to operations, other than the known issue of reduced consumption creating upward rate pressure.

1.2.5 – Utility Impact Review of Projects

Background: Some projects have a significant impact on the distribution of power, water, wastewater and other services provided by the City.
Goal: Projects should be reviewed for ways they can contribute to the overall stability and/or efficiency of the system. Examples include a microgrid, solar contributions, battery storage, or rainwater collection.

Policy: Projects will be evaluated for impact to the system and how they fit into expected growth patterns with respect to existing infrastructure in an area. As part of the development negotiation process the developer will be asked to mitigate their impact to the system. When a development is presented to the City Commission for approval, the presentation will address these impacts and the mitigation.

Staff Analysis:

Water/Wastewater

This policy is fairly vague, therefore is difficult to determine potential impact to W/WW. GRU typically is not involved in this type of negotiation with developers. The City or County planning departments may be the appropriate agencies to enact such policies.

Energy Delivery

Microgrids, solar and energy storage systems or devices will require a design review along with a distribution grid impact review. For larger projects, ED Electrical or Gas Engineering will need to conduct simulated model runs to calculate and analyze the impacts of the added / modified devices and their connection to the grid. If significant impacts are identified by the model runs, mitigation strategies will have to be developed. The cost to implement the mitigation strategies may be shared or born by GRU and the third party.

Energy Supply

Impact of further micro grid concepts could be beneficial to both customer and the utility. Impact of adding solar power with the adequate storage/or generation backup is yet to be fully determined as this is being negotiated at this time, and presented to UAB/CCOM for ultimate approval of PPA structure, cost, and provisions. The utility has already been presented in our IRP the cost estimates as we work towards our City approved 100% renewable by 2045 Resolution.

Section 2.0

UTILITY SUPPLY AND DISTRIBUTION

1.3 Diversification of Energy Sources

Background: The City of Gainesville has committed to a goal of providing 100 percent of the City's energy from renewable resources by 2045.
Goals: To achieve that goal with a diversification of energy sources, the City will focus on alternative local renewable energy generation and storage.

Policy: The City will strive to optimize use of the Deerhaven Renewable Facility (DHR) within the City's electrical generation portfolio, including the increased use of DHR when adopting and implementing a schedule to phase out Deerhaven 1 and 2 and the John R. Kelly plants by 2045.

Staff Analysis:

Water/Wastewater

The potential impacts are unknown. The W/WW System is a significant energy customer and changes in rates could have a direct impact on water and wastewater rates.

Energy Supply

Impact is yet to be fully determined until a formal path is approved in our Integrated Resource Plan (IRP), or we modify the IRP per direction of UAB/CCOM. We already have cost estimates in our IRP for the various options. Worth noting as we add more renewable sources to our system we need to do this at our deferred cost, and then fully evaluate long and short term impacts to both generation, reliability, and regulation compliance. With regard to solar intermittency we will need to have adequate storage in our projects scope to mitigate impact to our customers, and recognize the NERC regulation of solar is not the same as other generation sources. NERC does not allow for emergency reserve calls related to the intermittency of weather.

GRUCom

GRUCom critical facilities are engineered for 100 percent reliability and in many cases are required by the regulatory classification to provide such. Those facilities require on-site backup generation that may need to be more robust to accommodate service interruption if renewable system electric sources are less reliable and therefore would add to the cost of providing service. If the cost for GRUCom reliability assurance is more significant than our competitors, then it would impact our ability to offer competitive prices to our customers and therefore result in revenue loss for the business.

2.2 Renewable Energy Portfolio

Background: The City of Gainesville has committed to a goal of providing 100 percent of the City's energy from renewable resources by 2045.

Goal: To achieve 100 percent of the City's energy from renewable resources by 2045 (Resolution #180442.)
Policy: Plan, budget and implement programs that achieve a 100% renewable energy portfolio in incremental stages.

Staff Analysis:

Customer Support Services

Florida building code is uniform so Gainesville cannot require/mandate efficiency at a higher level than the building code already calls for. That leaves redevelopment incentives, retrofit rebates, and community weatherization programs in this section. In order for incentives and rebates to have any meaningful impact to an overall Integrated Resource Plan, they have to substantial enough to move customers to that next level of energy efficiency when having to make a purchasing decision or enough to make them abandon the technology that is currently in use to do the same. This can only be done by implementing a rebate/incentive level consistent with the Total Resource Cost test which, amongst other things, ignores the affect lost kWh sales has on the ability for the utility to recover revenues.

Impacts to Energy and Business Services would be substantial from a resource standpoint and a financial standpoint. There would also be substantial increased electric rate pressure as a stabilized program would require direct rebate funding levels to be around $3-$4 Million per year. Ramp up would take 2 to 3 years with market saturation most likely beginning within 10 years.

Water/Wastewater

The potential impacts are unknown. The W/WW System is a significant energy customer and changes in rates could have a direct impact on water and wastewater rates.

Energy Delivery

Phasing out gas-fired power plants will result in stranded gas distribution assets and will reduce economies of scale for current and future planned gas expansions.
Significant localized and grid-wide impacts may result from the energy supply variability of increased penetration of rooftop / ground mounted solar generation.
There is a cost to process permits, so waiving permit fees spreads that cost to customers not installing distributed generation.

The increased deployment of solar power will put stress on our existing transmission infrastructure and will at some point require an upgrade to transmission ties to neighboring utilities and upgrade (to 230KV) to the transmission loop around the city. There are many advantages to injecting stored energy into the distribution grid; however, the technology does introduce potential for degraded power quality, reduced reliability, load control, voltage and frequency regulation issues. Selection of the Energy Storage System (ESS) should be a joint effort between the customer and ED Electrical Engineering since the technology deployed will affect how GRU will need to address the grid issues outlined above. Options for ESS include but are not limited to battery, flywheel, thermal and compressed air storage.

Energy Supply

Impact same as above and for any renewable proposal brought to the UAB/CCOM a comprehensive review of impacts, options, and costing will be presented at that time. This will also include risk aspects of options presented. Energy Supply is leading a team effort with Energy Delivery for GRU to stay current on renewable options, and risk to the scope and cost of technology advances needed to achieve City Resolution objectives.

NERC Compliance

Possible addition of FTE(s) to compliance department and/or increase budget for consultant work. Any new generation owned and operated by GRU will require an in-depth review of compliance requirements for commissioning and ongoing maintenance, security, modeling, communications, etc. In the event that GRU partners with another entity for renewable energy, where GRU is not the sole purchaser of electricity, and GRU lines are used to transmit power from the renewable source to other entities via a tariff, then GRU will need to register with NERC as a Transmission Service Provider (TSP). This requires compliance with 107 additional requirements/sub-requirements.

GRUCom

Same concerns as in 2.1.

2.3 MAINTENANCE OF ASSETS AND RELIABILITY

Background: GRU observes high standards for safety and reliability which must be maintained as it expands its energy portfolio and moves towards renewable energy sources.

Goal: The maintenance of existing assets should be considered critical to the operation of GRU and may take precedence over new capital projects initiated by GRU and/or the City of Gainesville in order to maintain reliability standards and avoid unplanned outages.

Policy: GRU shall provide any and all necessary maintenance required to keep current facilities operating at maximum efficiency.

Staff Analysis:

Customer Support Services

I'm sure this section is referencing Power Plants, but just in case it's talking about assets in general, Facilities Maintenance already performs preventative maintenance on all its facilities and installs and retrofits energy and water efficiency measures whenever feasible and prudent to do so. No change in impact to Facilities Maintenance.

Water/Wastewater

The maintenance and reliability of the W/WW infrastructure is the foundation to providing sustainable services to the community. Continued prioritization on renewal and replacement of aging infrastructure and keeping all facilities reliable is the primary driver of water/wastewater systems.

Energy Delivery

No change to current ED policy on maintenance of existing assets.

Energy Supply

Impacts can be significant with the age of the vast majority of the generation fleet. The methodology going forward to meet electric needs of our customers (whether it be through generation or transmission) will determine the overall impact to system reliability, generation diversity, and the cost to meet this objective.

2.4 DEMAND RESPONSE AND ADVANCED METERING INFRASTRUCTURE

Background: The electrical demand in a utility's service area is typically met by operating a fleet of generating units for differing times at different load levels. With the advent of advanced metering infrastructure (AMI) and the internet of things (IoT), a region's electrical needs can also be met by customers changing the way they operate their home.

Goal: To integrate the consumer's ability to vary their electrical demand into the utility's control scheme in such a way as to make the local utility grid more resilient and more cost effective.

Policy: Future infrastructure decisions should consider consumer's ability to affect the electrical load profile through the planned combination of advanced metering infrastructure and the Internet of Things.

Staff Analysis:

Customer Support Services

Many opportunities exist for Demand Response leveraging AMI and real or planned pricing signals. Using the Internet of Things may have its benefits by attracting tech savvy customers who want to make a difference or want to leverage the capability of a smart home network, but it's not absolutely necessary to implement an affective DSM program. From a residential program design, there are 3 main appliances that have the biggest impact to utility systems; HVAC, Water Heater, and Pool Pumps. For HVAC, a thermostat based program which is easily accomplished with a NEST or other commercially available thermostat, is the easiest to implement and historically gains the largest adoption rate. The rest is up to the program design to determine discount/incentive levels and dispatch strategy. For a lot of programs, just providing the NEST thermostat is enough incentive for the customer to buy-in. For the Water Heater, a simple demand response controller is installed that can communicate through the AMI meter. Again, the program design determines the discount/incentive structure and dispatch strategy. The caveat with this program in Gainesville is that there is a large percentage of Natural Gas water heaters in our service territory so overall it won't be as impactful as a traditional electric only utility with the same program. Last, the pool pump would be set up much the same way as the water heater with a demand response enabled controller which talks to the AMI meter. Program design and dispatch strategy is determined just as before. The objective is to have a population large enough to create a positive impact to the utility system while using rotating segments fast enough not to greatly impact a customer's end use experience.

Energy and Business Services have not had Demand Response programs for quite some time, so these programs would have to be designed and implemented from square one. However, there are many Public Power utilities that have these programs

and are willing to share information as well as contractors to provide turn-key solutions. Impact to Energy and Business Services would be medium with most of that being resource time to design, build, and roll out the program. Cost/benefit would depend heavily on the value placed on the marginal cost of peaking generation. Program cost would be dependent on whether or not AMI is implemented throughout entire service territory and if we build the program in house or contract with a 3rd party provider for a turn-key solution.

Water/Wastewater

Advanced Metering Infrastructure (AMI) will be an incredible tool for customers to manage use and will be the foundation for water conservation. A goal of implementing this technology will be to reduce per person water usage and thereby extending the water supply for the community. The cost to implement will be significant for the water system because every water meter in the system will be replaced and this will require other improvements completed simultaneously. Some of the cost will be offset by cost savings from AMI, but overall the implementation costs are anticipated to exceed any savings.

Energy Delivery

To realize the benefits of AMI and IoT System Control will need to have visibility into and control of certain consumer loads. Implementing a demand pricing structure will require more advanced algorithms for dynamically calculating instantaneous Total Cost of Service (TCOS).

Energy Supply

Impact of a well thought out business case demand side management program can be very beneficial to both the utility and customers. This type effort will be predicated on having the budget to install the AMI metering needed for the desired scope of application. DSM systems aid utilities in reducing the overall cost of adding more peak generation, that can be costly.

2.5 URBAN DESIGN STANDARDS

Background: Often there are competing priorities when developing in an urban context: the Land Development Code which includes streetscape, trees, building placement; the Utility which requires safe, efficient and easily serviced infrastructure; and the Owner/Developer who wants predictable standards, a clear process for resolving conflict, and an attractive and fiscally feasible end result.

Goal: To recognize the needs and requirements of all relevant stakeholders and work together to achieve an acceptable end result through collaboration and compromise.

Policy: GRU and the City of Gainesville shall establish and regularly review a set of specific design standards for high density and/or urban development in which normally desired standards are not feasible

Staff Analysis:

Customer Support Services

This effort is already underway and is a collaboration between GG, GRU, and the Development Community.

Water/Wastewater

The development collaboration team determined that improvement in the design standards when appropriate should apply across the system and not isolated to only urban areas. This team should continue to collaborate and work together to improve design standards to meet current and future customer and citizen needs.

Energy Delivery

Could be significant impact to ED. The access to and maintenance of the devices specified in the new standards should be considered. Also, including shrub and tree planting in the urban design standards could impact GRU's vegetation management program.

GRUCom

Standards for new construction would be consistent and therefore should impact GRUCom the same as it impacts our competitors which is a level playing field in our competitive market. In the case of servicing existing facilities with telecom services, more restrictive spacing of utilities would necessarily give the incumbent provider (the one who is already in the right-of-way) an advantage versus extending new facilities to existing construction and would limit competition among providers. Limited competition among the telecom providers would result in higher costs for service and less choice to customers with no competitive alternative service.

2.6 ENERGY DISTRICTING

Background: Energy Districts have historically been areas where, through the economy of scale, efficient heating, cooling, and/or hot or chilled water are shared to a group of buildings. This allows greater versatility in the design of the structures, it frees property owners from the operation and maintenance cost of these systems, and typically there is greater reliability, redundancy and back up in the event of a power outage or system failure. A “net zero” energy district is a district that provides all its energy needs internally. A net zero energy district combines the synergistic effect of renewable energy, efficient building design, energy storage with both traditional energy districting and motivated tenants.

Goal: To seek opportunities for GRU to partner in the development process and expand GRU’s service role with its customers. Additional opportunities may be available for “net zero” energy districts as the City moves towards its goal of 100% renewable energy by 2045.

Policy: GRU and the City will look for opportunities for energy districting and for potential pilots for a net zero energy pilot project. The City will support these efforts with the cooperation and help from public works, the building department and the City Attorney’s office.

Staff Analysis:

Customer Support Services

Key Accounts Group would be integral in selling this concept to potential customers identified through internal strategic planning sessions between Leadership groups. Positive impact to Key Accounts in having another value added service to provide to our large customers.

Energy Delivery

ED could be impacted as a partner in a net zero energy district since maintenance and operation of the energy components of the district would likely fall to ED.

NERC Compliance

No impact unless this involves a new or modified substation.

2.7 WATER SUPPLY

Background: The responsibility of the Water Utility is to provide GRU customers with a reliable supply of clean, high quality drinking water now and into the future. The utility consists of the Murphree wellfield with 15 wells, the Murphree Water Treatment Plant and the pipe network that distributes the treated water to GRU customers. At the time of the writing of this policy, GRU has a perfect record of uninterrupted water supply.

Goal: Because the uninterrupted supply of clean water is critical to GRU customers, the goal of the water supply policy is to ensure that political or financial pressures are not allowed to impact the quality or reliability of GRU water supply.

Policy: GRU shall maintain the quality and reliability of the GRU water supply through adequate staffing and funding of the construction and maintenance of related facilities.

STAFF ANALYSIS:

Water/Wastewater

This policy is critically important to properly prioritize water quality and quantity in the community for existing and future customers.

2.8 WASTEWATER COLLECTION AND DISPOSAL

Background: The responsibility of the Wastewater Utility is to operate, protect and maintain the systems that collect, treat and disposes of residential, commercial and industrial sewage generated within its service area. The utility consists of Kanapaha Water Reclamation Facility and Main Street Water Reclamation Facility as well as a pipe network made up of gravity mains, pump stations and pressurized sewer pipes that convey wastewater to the treatment plants.

Goal: To reduce inefficiencies and mechanical failures which result in wastewater blockages, leaks, and interruption of wastewater collection, treatment and disposal.

Policy: Through its design and construction standards, GRU shall provide regulation and control of sewer connections, prevent the introduction of pollutants in the system, provide for the protection and wellbeing of personnel associated with the wastewater treatment system and the general public, and ensure that utility complies with its NPDES permit conditions, sludge use and disposal requirements, and any other federal or state laws to which the Publicly owned treatment works (POTW) is subject.

STAFF ANALYSIS:

Water/Wastewater

This policy is critically important to properly prioritize the wastewater collection and treatment process for the benefit of the citizens and the environment.

2.9 MUNICIPAL BROADBAND AND WIFI

Background: Communities with high quality and low-cost internet access see increases in economic development, property values and productivity.

Goal: To improve access to broadband or wifi and bridge the “digital divide” by providing public access to the internet.

Policy: GRU shall work, as requested, with the City of Gainesville and with businesses to provide internet access to as many people as possible in an economically viable way.

STAFF ANALYSIS:

GRUCom

The goal is likely too broad to be effective in developing policy if the desired effect is “more access” or “better performance”, or something else for “public” access in light of current conditions for broadband accessibility and performance in Gainesville. For instance…

- all schools have 10 gig capable access
- all libraries have broadband access available to the public
- many other public and private buildings and parks have public and free for customers broadband Wi-Fi access
- there is wired broadband service available to virtually every residence and business in Gainesville
- there is wireless broadband service available throughout Gainesville

Making this a GRU goal and not a City of Gainesville goal is likely severely limiting for whatever the reworked goal ends up being. The City and the public have far greater resources and funding flexibility through taxes, grants, service fees, etc. than GRU will ever have. Also, making it a GRU goal restricts participation from other providers that already enjoy economies of scale from currently providing service availability to almost every resident and visitor.

GRU through GRUCom does currently fulfill components of the proposed policy to a great degree. We work with the City of Gainesville and with businesses to provide MORE than internet access to as many people as possible in an economically viable way. GRUCom provides networking solutions and internet access at virtually unlimited speeds to most large businesses, the schools, libraries, more than 50 multi-dwelling residential clients through GATOR NET, and most government facilities.

The recent Broadband Feasibility Analysis outlines the effort, risks and potential rewards of the community funding broadband service beyond the established business results noted above. In short, with $113 million to $213 million of funding from the community, it is possible to extend the existing 600 miles of fiber-optic network by constructing about 650 to 1400 miles of additional fiber-optic facilities to new residential

customers that are currently served by private providers. The study outlines that the new network would need a little less than 50 percent of the customers passed by the new network to switch providers at an average of about 850 customers per month, for about 5 years, with a significant portion subscribing to new video and voice services at market rates, and maintain those adoption rates for about 25 years. The analysis projects that after 25 years the income from the new business would have produced $15.5 million to $32.9 million total cumulative cash IF ALL of the variables hold true.

Depending on the objectives of the goal, there are wide ranging regulatory and financial implications that are too broad to describe in general terms. As a municipal business our regulatory landscape is layered with business, federal, state and local requirements.

Section 3.0

TRANSPORTATION AND LAND USE

3.1 EFFICIENCY OF TRANSPORTATION

Background: The City of Gainesville's Comprehensive Plan states: The City shall become a national model for an enhanced community transit system with a variety of transportation services that provide a safe, convenient, accessible, comfortable, continuous, and aesthetically pleasing transportation environment that promotes walking and transit use. Service shall be provided with the cleanest, quietest, and most energy efficient equipment feasible.

Goal: To encourage efficient transportation systems that will enable people to minimize vehicle miles traveled (VMT) when traveling in the Gainesville urbanized area. Reducing VMT conserves fuel and reduces vehicle emissions. VMT reduction strategies—or transportation demand management—also can reduce traffic congestion, enable the use of more efficient vehicles, reduce transportation costs, and save time for drivers.

Policy: Partner with The Metropolitan Transportation Planning Organization (MTPO) to achieve a transportation system that is safe and efficient, serves the mobility needs of people and freight, and fosters economic prosperity while minimizing transportation-related fuel consumption and air pollution.

STAFF ANALYSIS:

No known operational impacts to GRU.

3.2 ELECTRIC VEHICLES AND CHARGING STATIONS

Background: At the time of the writing of this policy, electric vehicles (EVs) represent a very small percentage of vehicles in Gainesville. However, the numbers are rapidly increasing. This increase in EVs is desirable for GRU and the City of Gainesville because it represents a new need for GRU electricity. Additionally, EVs will improve air quality and climate impacts, which are also City and GRU goals.

In general, electricity usage by GRU customers is currently decreasing due to a combination of increased efficiency of electrical equipment (e.g., LED lights and high efficiency air conditioners) and the success of GRU conservation programs. Based on current usages, EVs would represent approximately a 30% increase in electricity needs for a typical GRU residential customer.

These EVs will require charging. For most single-family homes and some business, the addition of EV chargers will be relatively easy. However, for multi-family housing and other businesses, the addition of EV chargers through retrofits will be problematic. It should be noted that advances in EV battery ranges are reducing the need for charging during the day, except for extended driving days. However, the presence of charging stations can be helpful for EV drivers and increase the awareness of EVs for non-EV drivers.

Goal: To support the adoption rate of EVs and to ensure charging stations are available for the increasing number of EVs. This support needs to be done in a fiscally responsible way that balances the cost of the support with the expected benefits.

Policy: The City of Gainesville and GRU shall encourage the increased adoption of EVs and the availability of EV charging stations through fiscally responsible programs and incentives.

STAFF ANALYSIS:

Customer Support Services

GRU has been keeping a close eye on this industry and has taken small steps towards adoption in bringing Hybrids into its fleet and was an early adopter of several all-electric vehicles that were used for public education and outreach. Recently, GRU joined a consortium of other public utilities sponsored through Florida Municipal Electric Association to support a grant application for funding for advanced charging infrastructure. This funding was awarded to Florida as part of the VW settlement and if awarded to the group, would provide a funding mechanism to place multiple EV charging stations along the I75 corridor. Stations would be publically accessible and be at least level 2 chargers with the potential for level 3 if the business case supports it. If the grant is approved, there may be some in-kind expectation from the utility for making necessary upgrades and extensions of distribution lines to connect to the charging stations.

Energy Delivery

Installation and maintenance of charging stations will likely fall under the responsibility of ED. This will require resources.

Energy Supply

The impact could be considered a positive as we would be adding both load and diversity to our system. The hurdle is to determine the sweet spot of what volume of EV must be added to meet both customer needs and financial metrics.

3.3 MULTI MODAL AND LOW IMPACT TRANSPORTATION

Background: Cities with multi-modal and low impact transportation are desirable for several reasons, including attracting innovative businesses, benefiting low income citizens, reducing congestion, and reducing environmental impacts. The City of Gainesville has a history of multi-modal transportation. Gainesville regularly ranks in Bicycle Magazine's top 50 bicycle friendly cities.

Goal: The City wants to support the increase of multi-modal and low impact transportation.

Policy: The City of Gainesville has a policy of supporting multi-modal and low impact transportation while balancing the costs and potential benefits.

STAFF ANALYSIS:

No known operational impacts to GRU.

3.4 ENVIRONMENTAL IMPACTS AND ENVIRONMENTAL JUSTICE

Background: The negative environmental impacts of development, and the growing effects of climate change, disproportionately affect low-income communities and communities of color.

Goal: To create equity in city planning so that Gainesville residents receive the benefits and bear the burdens of development together, equally.

Policy: When making planning decisions the City of Gainesville will consider what communities will be most affected – both positively and negatively; how to mitigate existing and future environmental impacts for all communities, especially those that have historically carried a greater share of the burden; how to balance environmental protection with the need for investment in underserved areas; and how land use decisions either contribute to or counteract harmful historical development patterns across the city.

STAFF ANALYSIS:

Water/Wastewater

This policy is fairly vague and is difficult to quantify potential impacts to W/WW. In general, there is always a balance with environmental impacts and justice. The W/WW industry is heavily regulated and requires environmental protection.

Energy Supply

The impacts to how we use our generation facilities as it relates to environmental impact is always in the forefront. In fact back in 2009 GRU installed for Deerhaven Unit #2 an Air Quality Control System (AQCS), at a cost of over $147 million, to ensure unit could have met Clean Air Act requirements if they went into effect.

All the projects we execute in Energy Supply are with the full understanding of our overall environmental footprint. We work with the environmental group to ensure we are fully aware of any guidance we need to add to our project RFP's. Environmental permitting can be very expensive and must be considered in total cost. This could include battery disposal cost if utilized as storage source in our solar projects.

Community Relations

CR would seek to serve on any committee, advisory team, etc. that would address this issue.

SECTION 4.0

PUBLIC FACING AND FINANCIAL

4.1 EDUCATION PROGRAMS

Background: GRU and Gainesville's general government have multiple and extensive public outreach, education, and support programs to engage and inform the utilities' customer-owners which have met with varying degrees of success.

Goal: To better explain to customer-owners the vital role that GRU serves to provide safe, reliable, competitively priced utility services in an environmentally responsible manner, including the important relationship between rate structure, the General Fund Transfer and City Taxes.

Policy: GRU and the City Commission will offer education and outreach programs that engage customers so that they better understand the role of, and advocate for, the utilities that serve them. Focus on the value provided by, and need for, safe, reliable, competitively priced utility services in an environmentally responsible manner. Special consideration should be given to creating inclusive programs and materials designed to reach diverse communities within the customer base.

STAFF ANALYSIS:

Customer Support Services

I'm sure my groups may be a component in this effort along with Community Relations and Communications. We are willing to participate as we usually do in public outreach and education events.

Water/Wastewater

The W/WW team has a long history of engaging the public in educational efforts related to water and wastewater. This policy will guide W/WW to continue the plethora of efforts in the community. It will require staff time and some minor expenses to operate.

Energy Delivery

Customer facing processes such as meter reading could be impacted. Meter readers are and could be ambassadors for these programs.

Energy Supply

Energy Supply has a responsibility to provide detailed informative presentations/ information to help both educate, and answer questions, for UAB/CCOM and ultimately our customers.

Community Relations

CR is the hub for utility community outreach efforts. CR would work in partnership with subject matter experts to ensure successful implementation and delivery of educational programs. Would require staff time for project management.

4.2 RATE PLANNING AND DETERMINATION

Background: Rate setting, which includes determination of the General Fund transfer from Gainesville Regional Utilities to Gainesville general government, is the sole jurisdiction of the Gainesville City Commission. GRU staff prepares anticipated utility revenue needed for each of the City's five utilities to provide safe, reliable, competitively priced utility services in an environmentally responsible manner over a five to ten-year period. Staff present their recommendations based on these analyses to the Commission's Utility Advisory Board, which considers and recommends rates to the City Commission annually. The City Commission the holds a series of public meetings on these rates, balancing the utility's revenue needs within the overall City goals and customers' expectations, and adopts the annual rates.

Goal: To design rates that provide safe, reliable, competitively priced utility services in an environmentally responsible manner over a five to ten-year period in which rates are incrementally adjusted annually. To involve and engage the utilities' customers though public outreach and City Commission meetings. To focus on rate setting that meets the utility's revenue needs and the public's service needs, while separately addressing and reducing rate impacts for individual customers for whom utility payments represent a disproportionately high percentage of their income.

Policy: The City Commission will adjust utility rates incrementally annually over a five to ten-year period. Incremental changes allow customers to better estimate and plan for anticipated future utility costs and to more accurately predict and project energy savings through conservation or other measures. The City will encourage customer's participation and education through City Commission outreach and public meetings on rate setting to ensure to the best extent possible the public's understanding of why rates are being adjusted. The City should consider programs that offset disproportionate individual impacts, rather than reduce overall rates needed to sustain utility services and public needs.

STAFF ANALYSIS:

Water/Wastewater

The water and wastewater industry and GRU water and wastewater systems are currently engaged in the replacement era. Much of the infrastructure is aging and needs to be replaced. In spite of money saving efficiencies, the costs to renew and replace aging treatment plants and pipes is going to require an increase in rates over the next 10 years.

Energy Delivery

Forward looking projections of requirements for major infrastructure repair, overhaul or replacements should be an input into the rate planning process.

Energy Supply

The impact to operate within our budgets and always be looking for the opportunities to save money and meet City approved initiatives. As our fleet continues to age the O&M budgets are increasing to overcome reliability issues.

GRUCom

There are 4 utilities, GRUCom is not a utility. Our service is optional and rates are market based and not determined or approved by the Commission.

Community Relations

CR is the hub for utility community outreach efforts. CR would work in partnership with subject matter experts to ensure successful implementation and delivery of educational programs. Would require staff time for project management.

4.3 GENERAL FUND TRANSFER DETERMINATION

Background: The City of Gainesville is somewhat unique compared to most cities in that around 60% of the property exempt from paying property taxes. Combining this fact with Florida's legal limits on property tax rates reduces the ability of the City to receive funds through property taxes.

The City of Gainesville has many positives, such as excellent parks and cultural events. The City also has several challenges. The largest challenge is the income disparity. At the writing of this policy, the City is ranked in the top five nationally for income disparity. The General Fund Transfer (GFT) reflects the city's return on their investment in Gainesville Regional Utilities. These funds are important for the City to be able to provide important services to the citizens of Gainesville. However, the GFT also negatively impacts GRU rates which can create a burden on GRU customers – residential, customer, non-profits, etc. Therefore, the Gainesville City Commission has the task of balancing these two factors.

Historically, the GFT has been highly politicized. This can lead to short-term approaches, such as keeping rates constant while expenses increase by reducing rate stabilization funds to inappropriate levels. These periods are then followed by periods of rapid increase, which is a burden to GRU customers.

Goal: The goal of this quality is to aid the City Commission in balancing the needs to fund City services while not unduly burdening GRU customers – especially our most vulnerable citizens. Both GRU and general government programs that support citizens in need should be emphasized. When possible, rate changes should be more gradual and reflect longer term needs to maintain GRU services and the City's needs. Citizen engagement should be encouraged throughout the budgeting process.

Policy: The GFT shall be determined through the City budgeting process and shall reflect the balanced needs of maintaining GRU services, funding City services, and not unduly burdening GRU customers. City and GRU programs shall be supported to mitigate the impacts of these decisions on the City's most vulnerable citizens.

STAFF ANALYSIS:

Water/Wastewater

The GFT is an expense that impacts the water and wastewater system.

NERC Compliance

No impact. However… it needs to be recognized that a policy of "balancing needs" has historically been viewed as maintaining GRU service levels with an underpaid/understaffed workforce. The first and best line of defense against non-compliance is a competent, qualified, and engaged workforce in all departments. The total rewards study is a great step towards righting the ship, but GRU/CCOM should

adopt a policy that prioritizes the maintaining of market salaries as a prerequisite for the GFT. GRU/CCOM policy should reflect the belief that its employees are its greatest asset. If we are unable (or unwilling) to attract and retain the necessary quantity and quality of workforce, then we need to accept an elevated risk for non-achievement of our goals for safety, security, reliability, and compliance.

Community Relations

CR is the hub for utility community outreach efforts. CR would work in partnership with subject matter experts to ensure successful implementation and delivery of educational programs. Would require staff time for project management.

4.4 CITY/COUNTY RATE DIFFERENTIAL

Background: The State of Florida allows a municipal utility to impose a surcharge on the base rate plus usage for delivery of electricity and water services limited to a multiple of the Public Service Fee charged on those services delivered within the boundaries of the municipality. The State of Florida further limits the imposition of a surcharge on electricity to a maximum of 10% of the base rate plus usage. Each municipal utility must submit its surcharge plan to the Public Service Commission for approval.

Goal: The goal of the City of Gainesville is to support growth outside the city's boundaries subject to recognizing and recovering the higher cost to install and deliver services outside the city's boundaries.

Policy: The City of Gainesville should continue to recognize and recover the higher cost of delivering utility services by imposing a surtax outside of its boundaries.

STAFF ANALYSIS:

Water/Wastewater

A reduction in the rate differential will result in increased rates for the remaining customers in order to meet the revenue requirement for water and wastewater.

Energy Delivery

Proposed gas expansion could be affected by a higher surcharge for services outside the city.

4.5 UNIVERSITY OF FLORIDA

Background: The University of Florida is the largest electrical consumer within the Gainesville municipal area and is currently served by Duke Power. Some University units south of Archer Road and in other parts of the county are served by GRU. Electrical consumption on campus would represent about 20-25% of GRU's annual electricity production.

Goal: To develop a closer partnership with the University of Florida in an effort to spread the utility's fixed costs over a greater annual generation of electricity and other utilities. This will reduce the overall cost of generation and solidify the stated goals of partnership between the City and UF.

Policy: The City of Gainesville and GRU shall make every effort to become UF's preferred utility provider.

STAFF ANALYSIS:

Customer Support Services

Continue to develop and strengthen our relationship with UF and our Key Account group. This will need to be collaborative effort with representatives from Executive staff as well as City Commission and General Government.

Energy Delivery

Infrastructure currently servicing load at UF would need to be assessed as to condition, remaining life and future reliability. Significant maintenance / replacements might be required based on this assessment.

Energy Supply

Energy Supply is leading both the efforts and studies to be a true business partner with UF. The services we provide to UF Health at SEC are huge selling points to what our benefits to UF could be. Our Project Team is leading this efforts behind the scenes in support of the GM's objectives. Separate analysis of adding UF as a customer has been provided separately. The electric services portion is not as impactful as some may think, this works the opposite of load reductions. So bay adding UF we would spread our fixed cost like over more MW's, thus theoretically resulting in a bas load decrease to customers. This past assumptions is predicated on the potential cost of any capital O&M infrastructure that may be required.

NERC Compliance

No impact unless this involves a new or modified substation.

4.6 ECONOMIC DEVELOPMENT

Background: GRU would benefit financially from growth in demand for its utility services. The trade-off will be the cost of infrastructure needed to accommodate the increased demand. Those costs should be lower within GRU's existing service areas thus those areas should be the initial focus. On a case-by-case basis GRU may benefit from expanding its existing service areas. It is the policy of the City of Gainesville to encourage economic development efforts by insuring an adequate provision of utilities (water/sewer, electric, gas and broadband) to the community served by each of its utility services and to report on utility capacity and areas where utility service deficits exist.

Goal: GRU has not developed a wide audience when seeking to "tell its story" about reliability and service while maintaining competitive utility rates. GRU would benefit from developing a wider audience through targeting partners who serve the business community such as the economic development offices at chambers of commerce, Alachua County, UF, SFC, CareerSource of North Central Florida, and others. GRU would benefit by receiving input from the economic development partners and by engaging them to become its ambassadors and help "tell its story".

Policy: GRU will develop a list of potential economic development partners located within its service area, develop regularly scheduled communication, and encourage non-scheduled input with those partners to insure that it is a proactive participant in economic development.

STAFF ANALYSIS:

Customer Support Services

I see this as a combined effort of the Leadership group to get out in the business community and reestablish connections or strengthen already established ones. The Chamber of Commerce and GG Economic Development Office, Eric Bredfeldt should be part of this effort as well.

Energy Supply

Energy Supply is always looking for opportunities to provide wholesale power services, and we actively bid for each process we are invited to participate, with mixed results. The true barrier here is the age and efficiency of our generation fleet often does not make us as competitive to others that bid for these services, even when we trim our profits to a minimum.

NERC Compliance

No impact unless this involves a new or modified substation.

Community Relations

CR would assist Communications team, as necessary, to engage potential partners

Section 5.0

ENVIRONMENTAL AND CLIMATE RELATED

5.1 CLIMATE DISRUPTION PLANNING AND IMPACTS

Background: Climate change is expected to bring warmer temperatures, a rise in sea levels, more frequent and severe weather events, and an influx of people from coastal areas of Florida.

Goal: The City should prepare for the likely impacts of climate change, including increased requirements for severe weather resiliency and repair and the increased need for utility services.

Policy: The City of Gainesville shall study and plan for the likely impacts of climate change.

STAFF ANALYSIS:

Water/Wastewater

The studying and preparing for climate change depends on the amount of resources dedicated. Making changes to our systems in response to the analysis, again, depends on the magnitude.

Energy Delivery

Storm hardening is a continual effort in ED. The Mutual Aid program provides to GRU additional resources if needed in the event of a severe weather event.

Community Relations

Would seek to serve on any committee, advisory team, etc. that would address this issue.

5.2 FUEL SUPPLY

Background: Prudent operations of a utility require a reliable and flexible fuel supply and a diverse stable of generating units that can use these fuels. The ability to use different energy sources or fuels procured from different vendors and/or locales in a fast-changing future is a must. Currently GRU is one of the most fuel diverse utility in Florida.

Goal: We should maintain GRU's status as a premier fuel-diverse utility for the near future as we transition to renewable energy.

Policy: GRU shall maintain its status as a fuel diverse utility as it transitions to 100% renewable energy by 2045.

STAFF ANALYSIS:

Energy Supply

GRU Energy Supply is working on renewable options with our IRP, and also doing the due diligence evaluation of converting Deerhaven unit #2 to a dual fuel capability with natural gas and coal. This could drastically reduce CO2 emissions, and we are currently working on the scope of this study to move this information gathering forward for further analysis for our strategic plan.

5.3 ENERGY MANAGEMENT

Background: Energy Management is the process of monitoring, controlling and conserving energy. To a utility, that definition traditionally expands to include ensuring that power stations and renewable energy sources generate enough power to meet demand (or the amount of energy their customers need). Energy management can extend across the meter through energy efficiency, demand response (changing the power consumption of a customer to match with supply) and distributed energy resources (small scale power generation close to the load). This will become more critical and cost effective as supplies of fuels change and prices fluctuate. More extreme weather events will impact equipment life spans, cooling process efficiency, and overall system reliability.

Goal: To provide reliable power to customers with the least amount of fuel expended, to minimize waste and increase efficiency while protecting the climate and reducing costs.

Policy: Energy Management Systems will allow climate changes to be managed with less impact to customers and less cost to the utility once established. GRU will work toward an integrated Energy Management System which will provide long-term to both the utility and to customers. The City of Gainesville will support this goal financially.

Energy Delivery

To realize the benefits of AMI and IoT, System Control will need to have visibility into and control of certain consumer loads. Implementing a demand pricing structure will require more advanced algorithms for dynamically calculating instantaneous Total Cost of Service (TCOS).

Energy Supply

Impact is minor as GRU Energy Supply has a robust program to reduce each of the plants parasitic load, and has developed projects that add efficiency. Like VFD’s for fans and motors. The hurdle here is getting the discretionary budgets to support such initiatives by looking at the long term savings.

5.4 WATER SUPPLY

Background: It is projected fresh water will be an increasingly limited commodity and consequently be costlier.

Goal: To increase the efficiency of the delivery and consumption of water and stay within permitted water capacity.

Policy: To promote conservation of this limited resource, GRU will work towards charging the full cost of providing safe, reliable drinking water – not just the cost of treatment and distribution, but correspondingly the cost of instituted conservation measures and anticipated decrease in revenue.

STAFF ANALYSIS:

Water/Wastewater

The next unit of alternative water supply will be significantly more expensive. Therefore, by reducing per capita water use, the system is able to serve more customers for a longer period of time from the existing water supply. This approach avoids a future cost, therefore from a long term economic perspective, water conservation should continue to be promoted and encouraged.

Energy Supply

GRU Energy Supply must execute our part to conserve the water resources we have, as well as operate our 2 zero discharge facilities in the industry best practice methodologies.

5.5 ECONOMIC IMPACT OF CONSERVATION MEASURES

Background: Conservation measures promoted by the implementation of this policy will affect GRU's revenue streams negatively, given the current and traditional business model.

Goal: To promote conservation measures while maintaining appropriate revenue streams

Policy: GRU and the City of Gainesville will explore alternative utility operational models in order to continue to provide service to their customers in a reliable, safe, environmentally responsible and economically viable way.

STAFF ANALYSIS:

Customer Support Services
I'm not sure what this one is asking/directing. The Impact of Conservation Measures depends primary on two things, and one usually catalyzes the other. First the economic test used to evaluate whether or not to roll out a program. RIM test provides low/no cost programs that have very little impacts to energy demand and little to no impact to utility rates. They have so/so adoption which is the second "thing". The TRC test provides high cost programs that have huge impacts to energy and demand with very large impacts to utility rates. Because they are so effective they have a very large customer uptake which further impacts cost and rate impact. Think snowball effect.

Water/Wastewater
Water conservation does result in upward rate pressure. In addition, the next unit of alternative water supply will be significantly more expensive, therefore by reducing per capita water use, the system is able to serve more customers for a longer period of time from the existing water supply. This approach avoids a future cost, therefore from a long term economic perspective, water conservation should continue to be promoted and encouraged.

Energy Supply
Impacts are predicated on approved direction provided by CCOM, but Energy Supply has evaluated numerous financial impact potential of many options already.

INTRODUCTION TO THE CITY OF GAINESVILLE'S ENERGY AND UTILITY POLICY 2020 - 2030

EXECUTIVE SUMMARY:

"Owned by the people it serves."

That has been the guiding principle of Gainesville Regional Utilities since its creation and remains so for everything GRU does to this day. Reflecting the community's values, providing high-paying jobs, and reinvesting in our local economy wherever possible, the utility is an engine for growth and contributes to the quality of life in Gainesville and Alachua County.

The City of Gainesville has committed to a path of sustainability. This includes the goals of providing 100% renewable energy by the year 2045 and becoming a zero-waste community by 2040. Through the volunteer efforts of citizens serving on the City's Utility Advisory Board, this Energy and Utility Policy seeks to chart a balanced and measured path towards a sustainable utility and community; with sustainability being defined as not only environmentally responsible, but also socially just and economically viable. A path that will continue beyond the term of any one elected official, the tenure of any one GRU General Manager, or the individual contribution of any one citizen. While these goals are necessary to reduce greenhouse gas emissions, reduce pollution, and promote energy independence, they also come with a cost, and the path towards those goals must be thoughtful and driven by the collective wishes of GRU's owners – its customers.

ABOUT GAINESVILLE REGIONAL UTILITIES SERVICE AREA AND THE CITY OF GAINESVILLE

The City of Gainesville is the county seat of Alachua County and is home to approximately 135,000 residents. Gainesville is home to the University of Florida, a land grant university with the fifth largest university campus by enrollment as well as Santa Fe College, a large state college providing a variety of degrees and accredited certificate programs. The GRU service area is growing at a rate of approximately 1% or greater than 1000 people per year.

GRU's mission is to provide safe, reliable, competitively priced utility services in an environmentally responsible manner to enhance the quality of life in our community. This mission is the foundation for all work at the utility and for these policies.

GRU service area and populations?

Should point out that UF is not a GRU customer.

SECTION ONE: STRATEGIC PLAN

WHAT IS A POLICY?

A policy is a guiding principle, or set of guiding principles, that is used to set direction in an organization, and in this case, a local government. Policies are typically in the form of a governing principle, plan or course of action. Policies affect every community member in some way. Policies can determine everything from what services are provided to the kinds of development that take place in a community. Aspirational

A policy is necessary before processes and procedures can be effectively implemented. Processes and procedures are a defined series of steps to be followed as a consistent and repetitive approach to accomplish an end result. Processes and procedures are important and valuable tools in any organization or city but if they are written before an overall guiding policy has been established then they are typically (not well vetted) reactions to specific needs or events. Not every situation can be defined by a procedure or a process. A policy provides valuable guidance in these situations.

Some of the qualities of good policy include:

- Public support
- Fair and equitable to all stakeholders
- Backed by knowledge, analysis, and an understanding of the consequence of the policy on the community
- Relevance
- Feasible
- Flexible so that unintended consequences or failures can be addressed in a timely way

THE POLICY MAKING PROCESS

The policy making process weighs and balances public values and implements the community vision. There is often more than one technically correct way to solve a problem and this can lead to conflict and controversy. A good public policy will direct problem solving by setting the direction from the beginning and reduce the adversarial competing and conflicting interests when address an issue. And great policy will direct the destiny of a community through fulfillment of its dreams and aspirations. Policy making, when done well, brings diverse community interests together around a shared purpose through diplomacy, prudence, and knowledge of issues.

Policy making has constraints. Policy must be consistent with a community's vision, goals and objectives. It must be consistent with a community's comprehensive plan. It must not conflict with mandated local services (such as by state statute) or services that are prudent and customary. The policy must be able to be implemented within the given financial resources of a community and within the budget and capital improvements necessary for operation. The allocation of funds within a budget to meet competing needs is, in itself, a policy making procedure.

While policy making often falls to elected officials that may suffer from information overload. While they may have the final say in a policy implementation, the process of creating policy may be delegated to a group of qualified citizens with access to data, analysis, knowledge and experience.

GOING FORWARD

These policies are the first step in the process of realizing the energy and utility vision for Gainesville Regional Utilities and the City of Gainesville. Setting clear policy will lead to the next step for the City of Gainesville: clear, measurable goals and a strategic plan to prepare us for a future to address climate resiliency, support local jobs and a robust economy, provide positive economic support for the City and lower utility costs for residents and businesses.

This document is laid out in two main sections: Section One is the strategic plan and outlines the importance of an energy and utility policy and discusses how this policy can be used going forward. Section Two is the policy and the components of the policy in a unique cross-referenced format and includes links to current initiatives within the city that support those policies and links to additional information. These policies are not only tools for elected officials, managers and administrators, but they are tools for citizens. Citizens can use these policies to hold elected officials accountable in the decision-making process.

Policies may have unintended consequences and changes may take place in the community or in the nation that require a change of direction. For this reason, it is recommended that this policy expire within a given amount of time unless there is a formal policy review, a reimplementation of what is working, and a revision of what is not working.

This policy is intended to guide the City of Gainesville through the next decade. The policy should be updated and republished prior to 2030.

↳ perhaps every 5 years?
- metrics for initiatives?

	CURRENT AND PLANNED INITIATIVES	CROSS REFERENCE
0.0 THE BASE POLICY: GRU shall provide safe, reliable, competitively priced utility services in an environmentally responsible manner to enhance the quality of life in our community. To this end, the policies in this document must only be sustainably implemented, with respect to the triple bottom line of being economically viable, environmentally responsible, and equitable across Gainesville and GRU's service territory.		
1.0 THE BUILT ENVIRONMENT		
1.1 UTILITY EFFICIENCY PROGRAMS		
1.1.1 **RESIDENTIAL** Background: The efficient use of our natural resources is a primary goal for The City of Gainesville. Better service while minimizing consumption of critical resources benefits all concerned. Goals should be transparent and easy to measure. Goal: Residential electricity, water and natural gas consumption should be reduced through efficiency measures. These goals should be measured as the average residential account for the utility for each one of these services. Policy: GRU shall continue to evaluate and support residential efficiency programs for new construction and existing housing.	CWC, LEEP, HABITAT, etc. ↳ should have a list of acronyms. ↳ by how much?	POLICY 2.2
1.1.2 **COMMERCIAL, INSTITUTIONAL, AND INDUSTRIAL** Background: The City of Gainesville has educational utility efficiency programs for commercial and institutional GRU customers. Goal: To increase the efficiency of the delivery and consumption of resources. These programs must maintain GRU's safety, service levels, and fiscal responsibility while also encouraging the success of commercial customers. Policy: GRU shall continue to evaluate and support commercial and industrial efficiency programs.	Energy efficiency improvements can be achieved through improved efficiency of electricity equipment, reduced electricity needs through changes in operations, and the addition of renewable energy sources. Customers will be encouraged to seek "win-win" situations for customer-side demand management that reduces costs for the customer and improves energy generation efficiency for GRU.	

	Water efficiency improvements can be achieved through improved water efficiency systems, water reclamation, and internal graywater systems	
1.2 CITY INCENTIVES		
1.2.1 **MINIMUM EFFICIENCY STANDARDS FOR RENTAL PROPERTIES** Background: The existing housing stock in Gainesville is substandard and does not allow for the efficient use of resources. This adversely and disproportionately impacts the most vulnerable GRU customers. Goal: Rental properties should meet a measurable minimum standard of efficiency for water and energy consumption. Policy: The City shall require that rental housing meet a minimum standard of safety, efficiency, and comfort.	defined?	
1.2.2 **CODE ENFORCEMENT FOR NEW CONSTRUCTION** Background: City building officials work to ensure that structures conform to the plans submitted for review during the permitting process. However, many structures in GRU's service territory but do not conform to all aspects of the existing building codes. Goal: To have more efficient new construction. Policy: The City of Gainesville will require new construction to meet Florida Building Code standards.	This implies that we do not require this now.	
1.2.3 **HVAC DESIGN STANDARDS** Background: The efficiency of HVAC systems is dependent on proper sizing of equipment, and the size of equipment may change as buildings change use, change configuration, or are upgraded in any way. Goal: To increase the efficiency of HVAC systems across GRU's service territory. Policy: As required by the Florida Building Code, A Manual N (or Manual J&D as required by code) should be provided by a third party engineer independent of the HVAC installer	MANUAL N? MANUAL JD? Florida Building code	

prior to the bidding or selection of new or replacement HVAC equipment on municipal buildings.

livability

1.2.4 FINANCING EFFICIENCY AND LIVEABILITY PROJECTS - DON

Background: The City of Gainesville has been a leader in creating and supporting energy-efficiency improvements regardless of requirements by the State of Florida.

Goal: The City of Gainesville desires to continue as a leader in energy-efficient improvements.

Policy: The City of Gainesville shall participate with government agencies and non-government entities who provide capital for energy-efficiency improvement programs within its service area, subject to maintaining a neutral financial impact on non-participating GRU customers. GRU will offer on-bill repayment programs in order to facilitate and encourage energy-efficiency improvement programs offered by third parties.

1.3 UTILITY IMPACT REVIEW OF PROJECTS - MARY

Background: Some projects have a significant impact on the distribution of power, water, wastewater and other services provided by the City.

Goal: Projects should be reviewed for ways they can contribute to the overall stability and/or efficiency of the system. Examples include a microgrid, solar contributions, battery storage, or rainwater collection.

Policy: Projects will be evaluated for impact to the system and how they fit into expected growth patterns with respect to existing infrastructure in an area. As part of the development negotiation process the developer will be asked to mitigate their impact to the system. When a development is presented to the City Commission for approval, the presentation will address these impacts and the mitigation.

→ should this be at the DRC level?

2.0 UTILITY SUPPLY AND DISTRIBUTION

2.1 DIVERSIFICATION OF ENERGY SOURCES – WES

Background: The City of Gainesville has committed to a goal of providing 100 percent of the City's energy from renewable resources by 2045 (Resolution #180442).

Goals: To achieve that goal with a diversification of energy sources, the City will focus on alternative local renewable energy generation and storage.

The City will make an annual progress report to the Citizens of its efforts to reach the 2045 goal.

When making decisions on new or refurbished fuel sources the city will consider the remaining useful life of existing assets; impacts of new fuels sources on the utility's reliability; the total

Policies: The City will strive to maximize use of the Deerhaven Renewable Facility within the City's electrical generation portfolio, including the increased use of DHR when adopting and implementing a schedule to phase out Deerhaven 1 and 2 and the John R. Kelly plants by 2045.	cost of fuel sources including infrastructure, fuel costs and environmental costs; and the impact of different fuel sources on rates. Renewable energy sources that achieve the City's goal of 100 percent renewable by 2045 will be prioritized over fossil fuel burning.	
2.2 RENEWABLE ENERGY PORTFOLIO – WES Background: The City of Gainesville has committed to a goal of providing 100 percent of the City's energy from renewable resources by 2045 (Resolution #180442). Goal: To achieve 100 percent of the City's energy from renewable resources by 2045 (Resolution #180442. Policy: Plan, budget and implement programs that achieve a 100% renewable energy portfolio in incremental stages: • 30% of net electricity sales by December 31, 2020; • 60% of net electricity sales by December 31, 2030; • 100% of net electricity sales by December 31, 2040;	Reduce energy consumption (conserve) through increased efficiency standards, including development and redevelopment incentives, new building construction requirements, retrofit rebates, and community weatherization programs (both in-house and through local community partner programs). See Policy 2.1. Phase out Deerhaven 1 and 2 and the John R. Kelly plants by 2045. Such schedule will include reportable goals to be reported annually to the city. Develop a resilient distributed renewable power generation system by encouraging residents, business owners, and local governmental entities to build and maintain rooftop or ground-mount solar arrays. When fiscally prudent, expedite permit review by both GRU and the City building department, waive permit fees, offer financial incentives, continue support for net metering, and resume the solar feed-in-tariff program. Increase centralized solar power use and distribution by setting annual goals for either the construction of a city-owned solar field or the long-term purchase of solar power by agreement with private or public utilities. Such goals will be	

	measurable benchmarks in reaching the 2045 goal. Keep abreast of energy storage and battery options and the changing financial feasibility for these options, with a plan to incorporate energy storage into the GRU grid when fiscally prudent to do so. Incorporate goals and standards into the city's ten-year site plan, submitted annually to the Public Service Commission.	
2.3 MAINTENANCE OF ASSETS AND RELIABILITY – TIM Background: GRU holds a high level of standards for safety and reliability which must be maintained as it expands its energy portfolio and moves towards renewable energy sources. Goal: The maintenance of existing assets should be considered critical to the operation of GRU and may take precedence over new capital projects initiated by GRU and/or the City of Gainesville in order to maintain reliability standards and avoid unplanned outages. Policy: GRU shall provide any and all necessary maintenance required to keep current facilities operating at maximum efficiency.		
2.4 DEMAND RESPONSE AND ADVANCED METERING INFRASTRUCTURE-WENDELL Background: The electrical demand in a utility's service area is typically met by operating a fleet of generating units for differing times at different load levels. With the advent of advanced metering infrastructure and the internet of things, a region's electrical can also be met by customers changing the way they operate their home. Goal: To integrate the consumer's ability to vary their electrical demand into the utility's control scheme in such a way as to make the local utility grid more resilient and more cost effective. Policy: Future infrastructure decisions should include consumer's ability to affect the electrical load profile through the planned combination of advanced metering infrastructure and the Internet of Things.		
2.5 URBAN DESIGN STANDARDS – TIM		

Background: Often there are competing priorities when developing in an urban context: the Land Development Code which includes streetscape, trees, building placement; the Utility which requires safe, efficient and easily serviced infrastructure; and the Owner/Developer who wants predictable standards, a clear process for resolving conflict, and an attractive and fiscally feasible end result. Goal: To recognize the needs and requirements of all relevant stakeholders and work together to achieve an acceptable end result through collaboration and compromise. Policy: GRU and the City of Gainesville shall establish a regularly review a set of specific design standards specifically for high density and/or urban development in which normally desired standards are not feasible		
2.6 ENERGY DISTRICTING - MARY Background: Energy Districts have historically been areas where, through the economy of scale, efficient heating, cooling, and/or hot or chilled water are shared to a group of buildings. This allows greater versatility in the design of the structures, it frees property owners from the operation and maintenance cost of these systems, and typically there is greater reliability, redundancy and back up in the event of a power outage or system failure. A "net zero" energy district is a district that provides all its energy needs internally. A net zero energy district combines the synergistic effect of renewable energy, efficient building design, energy storage with both traditional energy districting and motivated tenants. Goal: To seek opportunities for GRU to partner in the development process and expand GRU's service role with its customers. Additional opportunities may be available for "net zero" energy districts as the City moves towards its goal of 100% renewable energy by 2045. Policy: GRU and the City will look for opportunities for energy districting and for potential pilots for a net zero energy pilot project. The City will support these efforts with the cooperation and help from public works, the ~~building department~~ Department of Sustainable Development and the City Attorney's office.	https://rmi.org/wp-content/uploads/2017/03/Insight-brief_Net-zero-energy8_2.pdf https://www.epa.gov/sites/production/files/2015-06/documents/sf_district_energy_planning.pdf	
2.7 WATER SUPPLY – BARRY Background: The responsibility of the Water Utility is to provide GRU customers with a reliable supply of clean, high quality drinking water now and into the future. The utility consists of the Murphree wellfield with 15 wells, the Murphree Water Treatment Plant		

and the pipe network that distributes the treated water to GRU customers. At the time of the writing of this policy, GRU has a perfect record of uninterrupted water supply.

Goal: Because the uninterrupted supply of clean water is critical to GRU customers, the goal of the water supply policy is to ensure that political or financial pressures are not allowed to impact the quality or reliability of GRU water supply.

Policy: GRU shall maintain the quality and reliability of the GRU water supply through adequate staffing and funding of the construction and maintenance of related facilities. Maintenance shall be carried out in accordance with policy 2.3.

2.8 WASTEWATER COLLECTION AND DISPOSAL – TIM

Background: The responsibility of the Wastewater Utility is to operate, protect and maintain the systems that collect, treat and disposes of residential, commercial and industrial sewage generated within its service area. The utility consists of Kanapaha Water Reclamation Facility and Main Street Water Reclamation Facility as well as a pipe network made up of gravity mains, pump stations and pressurized sewer pipes that convey wastewater to the treatment plants.

Goal: To reduce inefficiencies and mechanical failures which result in wastewater blockages, leaks, and interruption of wastewater collection, treatment and disposal.

Policy: Through its design and construction standards, GRU shall provide regulation and control of sewer connections, prevent the introduction of pollutants in the system, provide for the protection and wellbeing of personnel associated with the wastewater treatment system and the general public, and ensure that utility complies with its NPDES permit conditions, sludge use and disposal requirements, and any other federal or state laws to which the Publicly owned treatment works (POTW) is subject. Maintenance shall be carried out in accordance with policy 2.3

2.9 MUNICIPAL BROADBAND AND WIFI - MICHAEL

Background: Communities with high quality and low-cost internet access see increases in economic development, property values and productivity.

Goal: To improve access to broadband or wifi and bridge the "digital divide" by providing public access to the internet.

Policy: GRU shall work, as requested, with the City of Gainesville and with businesses to provide internet access to as many people as possible in an economically viable way.

3.0 TRANSPORTATION AND LAND USE

3.1 EFFICIENCY OF TRANSPORTATION – WES

Background: The City of Gainesville's Comprehensive Plan states: *The City shall become a national model for an enhanced community transit system with a variety of transportation services that provide a safe, convenient, accessible, comfortable, continuous, and aesthetically pleasing transportation environment that promotes walking and transit use. Service shall be provided with the cleanest, quietest, and most energy efficient equipment feasible.*

Goal: To encourage efficient transportation systems that will enable people to minimize vehicle miles traveled (VMT) when traveling in the Gainesville urbanized area. Reducing VMT conserves fuel and reduces vehicle emissions. VMT reduction strategies—or transportation demand management—also can reduce traffic congestion, enable the use of more efficient vehicles, reduce transportation costs, and save time for drivers.

Policy: Partner with The Metropolitan Transportation Planning Organization (MTPO) to achieve a transportation system that is safe and efficient, serves the mobility needs of people and freight, and fosters economic prosperity while minimizing transportation-related fuel consumption and air pollution.

This is really a function of 6G Transportation & Mobility

3.2 ELECTRIC VEHICLES AND CHARGING STATIONS – BARRY

Background: At the time of the writing of this policy, electric vehicles (EVs) represent a very small percentage of vehicles in Gainesville. However, the numbers are rapidly increasing. This increase in EVs is desirable for GRU and the City of Gainesville because it represents a new need for GRU electricity. Additionally, EVs will improve air quality and climate impacts, which are also City and GRU goals.

In general, electricity usage by GRU customers is currently decreasing due to a combination of increased efficiency of electrical equipment (e.g., LED lights and high efficiency air conditioners) and the success of GRU conservation programs. Based on

current usages, EVs would represent approximately a 30% increase in electricity needs for a typical GRU residential customer.

These EVs will require charging. For most single-family homes and some business, the addition of EV chargers will be relatively easy. However, for multi-family housing and other businesses, the addition of EV chargers through retrofits will be problematic. It should be noted that advances in EV battery ranges are reducing the need for charging during the day, except for extended driving days. However, the presence of charging stations can be helpful for EV drivers and increase the awareness of EVs for non-EV drivers.

Goal: To support the adoption rate of EVs and to ensure charging stations are available for the increasing number of EVs. This support needs to be done in a fiscally responsible way that balances the cost of the support with the expected benefits.

Policy: The City of Gainesville and GRU shall encourage the increased adoption of EVs and the availability of EV charging stations through fiscally responsible programs and incentives.

→ off-peak metering options?

3.3 MULTI MODAL AND LOW IMPACT TRANSPORTATION – BARRY

Background: Cities with multi-modal and low impact transportation are desirable for several reasons, including attracting innovative businesses, benefiting low income citizens, reducing congestion, and reducing environmental impacts. The City of Gainesville has a history of multi-modal transportation. Gainesville regularly ranks in Bicycle Magazine's top 50 bicycle friendly cities.

Goal: The City wants to support the increase of multi-modal and low impact transportation.

Policy: The City of Gainesville has a policy of supporting multi-modal and low impact transportation while balancing the costs and potential benefits.

66 Transportation + Mobility

3.4 ENVIRONMENTAL IMPACTS AND ENVIRONMENTAL JUSTICE - MICHAEL

Background: The negative environmental impacts of development, and the growing effects of climate change, disproportionately affect low-income communities and communities of color.

Goal: To create equity in city planning so that Gainesville residents receive the benefits and bear the burdens of development together, equally.

66 Sustainable Development

Policy: When making planning decisions the City of Gainesville will consider what communities will be most affected – both positively and negatively; how to mitigate existing and future environmental impacts for all communities, especially those that have historically carried a greater share of the burden; how to balance environmental protection with the need for investment in underserved areas; and how land use decisions either contribute to or counteract harmful historical development patterns across the city.

4.0 PUBLIC FACING AND FINANCIAL

4.1 EDUCATION PROGRAMS - CARLA

Background: The Utility is a publicly owned entity, but it is difficult for the public to remain informed, specifically regarding the rate plan/GFT functions and its purpose. It is important that the public understands the very important role the GRU plays in the City.

Goal: To educate the community on their collective ownership of the utility and the collection and purpose of the GFT through community events and workshops.

Policy: The City and Utility will work with Community partners to engage with customers in different communities to assist with the design of education materials for each area of our Energy Policy to assure they are easily understood and operational for all customers, and develop hands-on training materials for additional audiences not reachable by online resources.

4.2 RATE PLANNING AND DETERMINATION - CARLA

Background: Rates for utility services charged to residents, businesses and public entities such as Alachua County School Board or the University of Florida should reflect actual the cost of service. Wastewater rate policy is to utilize the winter water usage as a basis for wastewater charges in the remaining months of the year. Costs of service are expected to increase with inflation and with aging infrastructure.

Goal: Design rate changes that are predictable to allow for customers to project their costs and to accurately predict and project energy savings and to present to customers with explanation of increases or savings prior to being proposed to general government

Policy: The Utility should plan incremental adjustments projected outward over five to ten-year periods. Rate changes should be predictable to allow for customers to project their costs and to accurately predict and project energy savings.

The rate stabilization fund should be maintained at a level consistent with good industry practice and should always be used for the purpose intended.

4.3 GENERAL FUND TRANSFER DETERMINATION – BARRY

Background: The City of Gainesville is somewhat unique compared to most cities in that around 60% of the property exempt from paying property taxes. Combining this fact with Florida's legal limits property tax rates reduces the ability of the City to receive funds through property taxes.

The City of Gainesville has many positives, such as excellent parks and cultural events. The City also has several challenges. The largest challenge is the income disparity. At the writing of this policy, the City is ranked in the top five nationally for income disparity.

The General Fund Transfer (GFT) reflects the city's return on their investment in Gainesville Regional Utilities. These funds are important for the City to be able to provide important services to the citizens of Gainesville. However, the GFT also negatively impacts GRU rates which can create a burden on GRU customers – residential, customer, non-profits, etc. Therefore, the Gainesville City Commission has the unenviable task of balancing these two factors.

Historically, the GFT has been highly politicized. This can lead to short-term approaches, such as periods of rates remaining constant or even decreasing when revenues are dropping while expenses are increases by reducing rate stabilization funds to inappropriate levels. These periods are then followed by periods of rapid increase, which is a burden to GRU customers.

Goal: The goal of this quality is to aid the City Commission in balancing the needs to fund City services while not unduly burdening GRU customers – especially our most vulnerable citizens. Both GRU and general government programs that support citizens in need should be emphasized. When possible, rate changes should be more gradual and reflect longer term needs to maintain GRU services and the City's needs. Citizen engagement should be encouraged throughout the budgeting process.

Policy: The GFT shall be determined through the City budgeting process and shall reflect the balanced needs of maintaining GRU services, funding City services, and not unduly burdening GRU customers. City and GRU programs shall be supported to mitigate the impacts of these decisions on the City's most vulnerable citizens.

This does not reflect our current effort to develop a formula.

4.4 CITY/COUNTY RATE DIFFERENTIAL - DON

BACKGROUND: The State of Florida allows a municipal utility to impose a surcharge on the base rate plus usage for delivery of electricity and water services limited to a multiple of the Public Service Fee charged on those services delivered within the boundaries of the municipality. The State of Florida further limits the imposition of a surcharge on electricity to a maximum of 10% of the base rate plus usage. Each municipal utility must submit its surcharge plan to the Public Service Commission for approval.

GOAL: The goal of the City of Gainesville is to support growth outside the city's boundaries subject to recognizing and recovering the higher cost to install and deliver services outside the city's boundaries.

POLICY: The City of Gainesville should continue to recognize and recover the higher cost of delivering utility services by imposing a surtax outside of its boundaries.

4.5 UNIVERSITY OF FLORIDA – WENDELL

Background: The University of Florida is the largest electrical consumer within the Gainesville municipal area and is currently served by Duke Power. Some University units south of Archer Road and in other parts of the county are served by GRU. Electrical consumption on campus represents about 20-25% of GRU's annual electricity production.

Goal: To develop a closer partnership with the University of Florida in an effort to spread the utility's fixed costs over a greater annual generation of electricity and other utilities. This will reduce the overall cost of generation and solidify the stated goals of partnership between the City and UF.

Policy: The City of Gainesville and GRU shall make every effort to become UF's preferred utility provider.

4.6 ECONOMIC DEVELOPMENT - DON

Background: GRU would benefit financially from growth in demand for its utility services. The trade off will be the cost of infrastructure needed to accommodate the increased demand. Those costs should be lower within GRU's existing service areas thus those areas should be the initial focus. On a case-by-case basis GRU may benefit from expanding its existing service areas. It is the policy of the City of Gainesville to encourage economic development efforts by insuring an adequate provision of utilities (water/sewer, electric, gas and broadband) to the community served by each of its utility services and to report on utility capacity and areas where utility service deficits exist.

Goal: GRU has not developed a wide audience when seeking to "tell its story" about reliability and service while maintaining competitive utility rates. GRU would benefit from developing a wider audience through targeting partners who serve the business community such as the economic development offices at chambers of commerce, Alachua County, UF, SFC, CareerSource of North Central Florida, and others. GRU would benefit by receiving input from the economic development partners and by engaging them to become its ambassadors and help "tell its story". Policy: GRU will develop a list of potential economic development partners located within its service area, develop regularly scheduled communication, and encourage non-scheduled input with those partners to insure that it is a proactive participant in economic development.		
5.0 ENVIRONMENTAL AND CLIMATE RELATED		
5.1 CLIMATE DISRUPTION PLANNING AND IMPACTS – BARRY Background: Climate change is expected to bring warmer temperatures, a rise in sea levels, more frequent and severe weather events, and an influx of people from coastal areas of Florida. Goal: The City should prepare for the likely impacts of climate change, including increased requirements for severe weather resiliency and repair and the increased need for utility services. Policy: The City of Gainesville has a policy of planning for the likely impacts of climate change	REFERENCE: ADAPTING TO CLIMATE CHANGE: A GUIDE FOR THE ENERGY AND UTILITY INDUSTRY, BSR	
5.2 FUEL SUPPLY – WENDELL Background: Prudent operations of a utility require a reliable and flexible fuel supply and a diverse stable of generating units that can use these fuels. The ability to use different energy sources or fuels procured from different vendors and/or locales in a fast-changing future is a must. Currently GRU is one of the most fuel diverse utility in Florida. Goal: We should maintain GRU's status as a premier fuel-diverse utility for the near future as we transition to renewable energy. Policy : GRU shall maintain its status as a fuel diverse utility as it transitions to 100% renewable energy by 2045.		

5.3 ENERGY MANAGEMENT - CARLA will become more critical and cost effective as supplies of fuels change and prices fluctuate. Climate variability will increase strains on the electrical grid, both above and below ground. Additionally, the number of heating days and cooling days will change impacting equipment lifespan, cooling process efficiency, and may affect overall system reliability if not managed. Energy management systems must be prioritized in order to meet these challenges.		
5.4 WATER SUPPLY - THERESA Background: It is projected fresh water will be an increasingly limited commodity and consequently be more costly. Goal: To increase the efficiency of the delivery and consumption of natural resources (water) and stay within permitted water capacity. Policy: To promote conservation of this limited resource, GRU will work towards charging the full cost of providing safe, reliable drinking water – not just the cost of treatment and distribution, but correspondingly the cost of instituted conservation measures and anticipated decrease in revenue.		
5.5 ECONOMIC IMPACT OF CONSERVATION MEASURES - THERESA Background: Conservation measures promoted by the implementation of this policy will affect GRU's revenue streams negatively, given the current and traditional business model. Goal: To promote conservation measures while maintaining appropriate revenue streams Policy: GRU and the City of Gainesville will explore alternative utility operational models in order to be able to continue to provide service to their customers in a reliable, safe, environmentally responsible and economically viable way.		

INTRODUCTION TO THE CITY OF GAINESVILLE'S ENERGY AND UTILITY POLICY 2020 - 2030

EXECUTIVE SUMMARY:

"Owned by the people it serves."

That has been the guiding principle of Gainesville Regional Utilities since its creation and remains so for everything GRU does to this day. Reflecting the community's values, providing high-paying jobs, and reinvesting in our local economy wherever possible, the utility is an engine for growth and contributes to the quality of life in Gainesville and Alachua County.

The City of Gainesville has committed to a path of sustainability. This includes the goals of providing 100% renewable energy by the year 2045 and becoming a zero-waste community by 2040. Through the volunteer efforts of citizens serving on the City's Utility Advisory Board, this Energy and Utility Policy seeks to chart a balanced and measured path towards a sustainable utility and community; with sustainability being defined as not only environmentally responsible, but also socially just and economically viable. A path that will continue beyond the term of any one elected official, the tenure of any one GRU General Manager, or the individual contribution of any one citizen. While these goals are necessary to reduce greenhouse gas emissions, reduce pollution, and promote energy independence, they also come with a cost, and the path towards those goals must be thoughtful and driven by the collective wishes of GRU's owners – its customers.

ABOUT GAINESVILLE REGIONAL UTILITIES SERVICE AREA AND THE CITY OF GAINESVILLE

The City of Gainesville is the county seat of Alachua County and is home to approximately 135,000 residents. Gainesville is home to the University of Florida, a land grant university with the fifth largest university campus by enrollment as well as Santa Fe College, a large state college providing a variety of degrees and accredited certificate programs. The GRU service area is growing at a rate of approximately 1% or greater than 1000 people per year.

GRU's mission is to provide safe, reliable, competitively priced utility services in an environmentally responsible manner to enhance the quality of life in our community. This mission is the foundation for all work at the utility and for these policies.

GRU service area and populations?

Should point out that UF is not a GRU customer.

SECTION ONE: STRATEGIC PLAN

WHAT IS A POLICY?

A policy is a guiding principle, or set of guiding principles, that is used to set direction in an organization, and in this case, a local government. Policies are typically in the form of a governing principle, plan or course of action. Policies affect every community member in some way. Policies can determine everything from what services are provided to the kinds of development that take place in a community. Aspirational

A policy is necessary before processes and procedures can be effectively implemented. Processes and procedures are a defined series of steps to be followed as a consistent and repetitive approach to accomplish an end result. Processes and procedures are important and valuable tools in any organization or city but if they are written before an overall guiding policy has been established then they are typically (not well vetted) reactions to specific needs or events. Not every situation can be defined by a procedure or a process. A policy provides valuable guidance in these situations.

Some of the qualities of good policy include:

- Public support
- Fair and equitable to all stakeholders
- Backed by knowledge, analysis, and an understanding of the consequence of the policy on the community
- Relevance
- Feasible
- Flexible so that unintended consequences or failures can be addressed in a timely way

THE POLICY MAKING PROCESS

The policy making process weighs and balances public values and implements the community vision. There is often more than one technically correct way to solve a problem and this can lead to conflict and controversy. A good public policy will direct problem solving by setting the direction from the beginning and reduce the adversarial competing and conflicting interests when address an issue. And great policy will direct the destiny of a community through fulfillment of its dreams and aspirations. Policy making, when done well, brings diverse community interests together around a shared purpose through diplomacy, prudence, and knowledge of issues.

Policy making has constraints. Policy must be consistent with a community's vision, goals and objectives. It must be consistent with a community's comprehensive plan. It must not conflict with mandated local services (such as by state statute) or services that are prudent and customary. The policy must be able to be implemented within the given financial resources of a community and within the budget and capital improvements necessary for operation. The allocation of funds within a budget to meet competing needs is, in itself, a policy making procedure.

While policy making often falls to elected officials that may suffer from information overload. While they may have the final say in a policy implementation, the process of creating policy may be delegated to a group of qualified citizens with access to data, analysis, knowledge and experience.

GOING FORWARD

These policies are the first step in the process of realizing the energy and utility vision for Gainesville Regional Utilities and the City of Gainesville. Setting clear policy will lead to the next step for the City of Gainesville: clear, measurable goals and a strategic plan to prepare us for a future to address climate resiliency, support local jobs and a robust economy, provide positive economic support for the City and lower utility costs for residents and businesses.

This document is laid out in two main sections: Section One is the strategic plan and outlines the importance of an energy and utility policy and discusses how this policy can be used going forward. Section Two is the policy and the components of the policy in a unique cross-referenced format and includes links to current initiatives within the city that support those policies and links to additional information. These policies are not only tools for elected officials, managers and administrators, but they are tools for citizens. Citizens can use these policies to hold elected officials accountable in the decision-making process.

Policies may have unintended consequences and changes may take place in the community or in the nation that require a change of direction. For this reason, it is recommended that this policy expire within a given amount of time unless there is a formal policy review, a reimplementation of what is working, and a revision of what is not working.

This policy is intended to guide the City of Gainesville through the next decade. The policy should be updated and republished prior to 2030.

↳ perhaps every 5 years?
- metrics for initiatives?

	CURRENT AND PLANNED INITIATIVES	CROSS REFERENCE
0.0 THE BASE POLICY: GRU shall provide safe, reliable, competitively priced utility services in an environmentally responsible manner to enhance the quality of life in our community. To this end, the policies in this document must only be sustainably implemented, with respect to the triple bottom line of being economically viable, environmentally responsible, and equitable across Gainesville and GRU's service territory.		
1.0 THE BUILT ENVIRONMENT		
1.1 UTILITY EFFICIENCY PROGRAMS		
1.1.1 **RESIDENTIAL** Background: The efficient use of our natural resources is a primary goal for The City of Gainesville. Better service while minimizing consumption of critical resources benefits all concerned. Goals should be transparent and easy to measure. Goal: Residential electricity, water and natural gas consumption should be reduced through efficiency measures. These goals should be measured as the average residential account for the utility for each one of these services. Policy: GRU shall continue to evaluate and support residential efficiency programs for new construction and existing housing.	CWC, LEEP, HABITAT, etc. ↳ should have a list of acronyms. ↳ by how much?	POLICY 2.2
1.1.2 **COMMERCIAL, INSTITUTIONAL, AND INDUSTRIAL** Background: The City of Gainesville has educational utility efficiency programs for commercial and institutional GRU customers. Goal: To increase the efficiency of the delivery and consumption of resources. These programs must maintain GRU's safety, service levels, and fiscal responsibility while also encouraging the success of commercial customers. Policy: GRU shall continue to evaluate and support commercial and industrial efficiency programs.	Energy efficiency improvements can be achieved through improved efficiency of electricity equipment, reduced electricity needs through changes in operations, and the addition of renewable energy sources. Customers will be encouraged to seek "win-win" situations for customer-side demand management that reduces costs for the customer and improves energy generation efficiency for GRU.	

	Water efficiency improvements can be achieved through improved water efficiency systems, water reclamation, and internal graywater systems	
1.2 CITY INCENTIVES		
1.2.1 **MINIMUM EFFICIENCY STANDARDS FOR RENTAL PROPERTIES** Background: The existing housing stock in Gainesville is substandard and does not allow for the efficient use of resources. This adversely and disproportionately impacts the most vulnerable GRU customers. Goal: Rental properties should meet a measurable minimum standard of efficiency for water and energy consumption. Policy: The City shall require that rental housing meet a minimum standard of safety, efficiency, and comfort.	defined?	
1.2.2 **CODE ENFORCEMENT FOR NEW CONSTRUCTION** Background: City building officials work to ensure that structures conform to the plans submitted for review during the permitting process. However, many structures in GRU's service territory but do not conform to all aspects of the existing building codes. Goal: To have more efficient new construction. Policy: The City of Gainesville will require new construction to meet Florida Building Code standards.	This implies that we do not require this now.	
1.2.3 **HVAC DESIGN STANDARDS** Background: The efficiency of HVAC systems is dependent on proper sizing of equipment, and the size of equipment may change as buildings change use, change configuration, or are upgraded in any way. Goal: To increase the efficiency of HVAC systems across GRU's service territory. Policy: As required by the Florida Building Code, A Manual N (or Manual J&D as required by code) should be provided by a third party engineer independent of the HVAC installer	MANUAL N? MANUAL JD? Florida Building code	

prior to the bidding or selection of new or replacement HVAC equipment on municipal buildings.

livability

1.2.4 FINANCING EFFICIENCY AND LIVEABILITY PROJECTS - DON

Background: The City of Gainesville has been a leader in creating and supporting energy-efficiency improvements regardless of requirements by the State of Florida.

Goal: The City of Gainesville desires to continue as a leader in energy-efficient improvements.

Policy: The City of Gainesville shall participate with government agencies and non-government entities who provide capital for energy-efficiency improvement programs within its service area, subject to maintaining a neutral financial impact on non-participating GRU customers. GRU will offer on-bill repayment programs in order to facilitate and encourage energy-efficiency improvement programs offered by third parties.

1.3 UTILITY IMPACT REVIEW OF PROJECTS - MARY

Background: Some projects have a significant impact on the distribution of power, water, wastewater and other services provided by the City.

Goal: Projects should be reviewed for ways they can contribute to the overall stability and/or efficiency of the system. Examples include a microgrid, solar contributions, battery storage, or rainwater collection.

Policy: Projects will be evaluated for impact to the system and how they fit into expected growth patterns with respect to existing infrastructure in an area. As part of the development negotiation process the developer will be asked to mitigate their impact to the system. When a development is presented to the City Commission for approval, the presentation will address these impacts and the mitigation.

→ should this be at the DRC level?

2.0 UTILITY SUPPLY AND DISTRIBUTION

2.1 DIVERSIFICATION OF ENERGY SOURCES – WES

Background: The City of Gainesville has committed to a goal of providing 100 percent of the City's energy from renewable resources by 2045 (Resolution #180442).

Goals: To achieve that goal with a diversification of energy sources, the City will focus on alternative local renewable energy generation and storage.

The City will make an annual progress report to the Citizens of its efforts to reach the 2045 goal.

When making decisions on new or refurbished fuel sources the city will consider the remaining useful life of existing assets; impacts of new fuels sources on the utility's reliability; the total

Policies: The City will strive to maximize use of the Deerhaven Renewable Facility within the City's electrical generation portfolio, including the increased use of DHR when adopting and implementing a schedule to phase out Deerhaven 1 and 2 and the John R. Kelly plants by 2045.	cost of fuel sources including infrastructure, fuel costs and environmental costs; and the impact of different fuel sources on rates. Renewable energy sources that achieve the City's goal of 100 percent renewable by 2045 will be prioritized over fossil fuel burning.	
2.2 RENEWABLE ENERGY PORTFOLIO – WES Background: The City of Gainesville has committed to a goal of providing 100 percent of the City's energy from renewable resources by 2045 (Resolution #180442). Goal: To achieve 100 percent of the City's energy from renewable resources by 2045 (Resolution #180442. Policy: Plan, budget and implement programs that achieve a 100% renewable energy portfolio in incremental stages: • 30% of net electricity sales by December 31, 2020; • 60% of net electricity sales by December 31, 2030; • 100% of net electricity sales by December 31, 2040;	Reduce energy consumption (conserve) through increased efficiency standards, including development and redevelopment incentives, new building construction requirements, retrofit rebates, and community weatherization programs (both in-house and through local community partner programs). See Policy 2.1. Phase out Deerhaven 1 and 2 and the John R. Kelly plants by 2045. Such schedule will include reportable goals to be reported annually to the city. Develop a resilient distributed renewable power generation system by encouraging residents, business owners, and local governmental entities to build and maintain rooftop or ground-mount solar arrays. When fiscally prudent, expedite permit review by both GRU and the City building department, waive permit fees, offer financial incentives, continue support for net metering, and resume the solar feed-in-tariff program. Increase centralized solar power use and distribution by setting annual goals for either the construction of a city-owned solar field or the long-term purchase of solar power by agreement with private or public utilities. Such goals will be	

	measurable benchmarks in reaching the 2045 goal. Keep abreast of energy storage and battery options and the changing financial feasibility for these options, with a plan to incorporate energy storage into the GRU grid when fiscally prudent to do so. Incorporate goals and standards into the city's ten-year site plan, submitted annually to the Public Service Commission.	
2.3 MAINTENANCE OF ASSETS AND RELIABILITY – TIM Background: GRU holds a high level of standards for safety and reliability which must be maintained as it expands its energy portfolio and moves towards renewable energy sources. Goal: The maintenance of existing assets should be considered critical to the operation of GRU and may take precedence over new capital projects initiated by GRU and/or the City of Gainesville in order to maintain reliability standards and avoid unplanned outages. Policy: GRU shall provide any and all necessary maintenance required to keep current facilities operating at maximum efficiency.		
2.4 DEMAND RESPONSE AND ADVANCED METERING INFRASTRUCTURE-WENDELL Background: The electrical demand in a utility's service area is typically met by operating a fleet of generating units for differing times at different load levels. With the advent of advanced metering infrastructure and the internet of things, a region's electrical can also be met by customers changing the way they operate their home. Goal: To integrate the consumer's ability to vary their electrical demand into the utility's control scheme in such a way as to make the local utility grid more resilient and more cost effective. Policy: Future infrastructure decisions should include consumer's ability to affect the electrical load profile through the planned combination of advanced metering infrastructure and the Internet of Things.		
2.5 URBAN DESIGN STANDARDS – TIM		

Background: Often there are competing priorities when developing in an urban context: the Land Development Code which includes streetscape, trees, building placement; the Utility which requires safe, efficient and easily serviced infrastructure; and the Owner/Developer who wants predictable standards, a clear process for resolving conflict, and an attractive and fiscally feasible end result. Goal: To recognize the needs and requirements of all relevant stakeholders and work together to achieve an acceptable end result through collaboration and compromise. Policy: GRU and the City of Gainesville shall establish a regularly review a set of specific design standards specifically for high density and/or urban development in which normally desired standards are not feasible		
2.6 ENERGY DISTRICTING - MARY Background: Energy Districts have historically been areas where, through the economy of scale, efficient heating, cooling, and/or hot or chilled water are shared to a group of buildings. This allows greater versatility in the design of the structures, it frees property owners from the operation and maintenance cost of these systems, and typically there is greater reliability, redundancy and back up in the event of a power outage or system failure. A "net zero" energy district is a district that provides all its energy needs internally. A net zero energy district combines the synergistic effect of renewable energy, efficient building design, energy storage with both traditional energy districting and motivated tenants. Goal: To seek opportunities for GRU to partner in the development process and expand GRU's service role with its customers. Additional opportunities may be available for "net zero" energy districts as the City moves towards its goal of 100% renewable energy by 2045. Policy: GRU and the City will look for opportunities for energy districting and for potential pilots for a net zero energy pilot project. The City will support these efforts with the cooperation and help from public works, the ~~building department~~ Department of Sustainable Development and the City Attorney's office.	https://rmi.org/wp-content/uploads/2017/03/Insight-brief_Net-zero-energy8_2.pdf https://www.epa.gov/sites/production/files/2015-06/documents/sf_district_energy_planning.pdf	
2.7 WATER SUPPLY – BARRY Background: The responsibility of the Water Utility is to provide GRU customers with a reliable supply of clean, high quality drinking water now and into the future. The utility consists of the Murphree wellfield with 15 wells, the Murphree Water Treatment Plant		

and the pipe network that distributes the treated water to GRU customers. At the time of the writing of this policy, GRU has a perfect record of uninterrupted water supply.

Goal: Because the uninterrupted supply of clean water is critical to GRU customers, the goal of the water supply policy is to ensure that political or financial pressures are not allowed to impact the quality or reliability of GRU water supply.

Policy: GRU shall maintain the quality and reliability of the GRU water supply through adequate staffing and funding of the construction and maintenance of related facilities. Maintenance shall be carried out in accordance with policy 2.3.

2.8 WASTEWATER COLLECTION AND DISPOSAL – TIM

Background: The responsibility of the Wastewater Utility is to operate, protect and maintain the systems that collect, treat and disposes of residential, commercial and industrial sewage generated within its service area. The utility consists of Kanapaha Water Reclamation Facility and Main Street Water Reclamation Facility as well as a pipe network made up of gravity mains, pump stations and pressurized sewer pipes that convey wastewater to the treatment plants.

Goal: To reduce inefficiencies and mechanical failures which result in wastewater blockages, leaks, and interruption of wastewater collection, treatment and disposal.

Policy: Through its design and construction standards, GRU shall provide regulation and control of sewer connections, prevent the introduction of pollutants in the system, provide for the protection and wellbeing of personnel associated with the wastewater treatment system and the general public, and ensure that utility complies with its NPDES permit conditions, sludge use and disposal requirements, and any other federal or state laws to which the Publicly owned treatment works (POTW) is subject. Maintenance shall be carried out in accordance with policy 2.3

2.9 MUNICIPAL BROADBAND AND WIFI - MICHAEL

Background: Communities with high quality and low-cost internet access see increases in economic development, property values and productivity.

Goal: To improve access to broadband or wifi and bridge the "digital divide" by providing public access to the internet.

Policy: GRU shall work, as requested, with the City of Gainesville and with businesses to provide internet access to as many people as possible in an economically viable way.

3.0 TRANSPORTATION AND LAND USE

3.1 EFFICIENCY OF TRANSPORTATION – WES

Background: The City of Gainesville's Comprehensive Plan states: *The City shall become a national model for an enhanced community transit system with a variety of transportation services that provide a safe, convenient, accessible, comfortable, continuous, and aesthetically pleasing transportation environment that promotes walking and transit use. Service shall be provided with the cleanest, quietest, and most energy efficient equipment feasible.*

Goal: To encourage efficient transportation systems that will enable people to minimize vehicle miles traveled (VMT) when traveling in the Gainesville urbanized area. Reducing VMT conserves fuel and reduces vehicle emissions. VMT reduction strategies—or transportation demand management—also can reduce traffic congestion, enable the use of more efficient vehicles, reduce transportation costs, and save time for drivers.

Policy: Partner with The Metropolitan Transportation Planning Organization (MTPO) to achieve a transportation system that is safe and efficient, serves the mobility needs of people and freight, and fosters economic prosperity while minimizing transportation-related fuel consumption and air pollution.

This is really a function of GG Transportation & Mobility

3.2 ELECTRIC VEHICLES AND CHARGING STATIONS – BARRY

Background: At the time of the writing of this policy, electric vehicles (EVs) represent a very small percentage of vehicles in Gainesville. However, the numbers are rapidly increasing. This increase in EVs is desirable for GRU and the City of Gainesville because it represents a new need for GRU electricity. Additionally, EVs will improve air quality and climate impacts, which are also City and GRU goals.

In general, electricity usage by GRU customers is currently decreasing due to a combination of increased efficiency of electrical equipment (e.g., LED lights and high efficiency air conditioners) and the success of GRU conservation programs. Based on

current usages, EVs would represent approximately a 30% increase in electricity needs for a typical GRU residential customer.

→ off-peak metering options?

These EVs will require charging. For most single-family homes and some business, the addition of EV chargers will be relatively easy. However, for multi-family housing and other businesses, the addition of EV chargers through retrofits will be problematic. It should be noted that advances in EV battery ranges are reducing the need for charging during the day, except for extended driving days. However, the presence of charging stations can be helpful for EV drivers and increase the awareness of EVs for non-EV drivers.

Goal: To support the adoption rate of EVs and to ensure charging stations are available for the increasing number of EVs. This support needs to be done in a fiscally responsible way that balances the cost of the support with the expected benefits.

Policy: The City of Gainesville and GRU shall encourage the increased adoption of EVs and the availability of EV charging stations through fiscally responsible programs and incentives.

3.3 MULTI MODAL AND LOW IMPACT TRANSPORTATION – BARRY

Background: Cities with multi-modal and low impact transportation are desirable for several reasons, including attracting innovative businesses, benefiting low income citizens, reducing congestion, and reducing environmental impacts. The City of Gainesville has a history of multi-modal transportation. Gainesville regularly ranks in Bicycle Magazine's top 50 bicycle friendly cities.

Goal: The City wants to support the increase of multi-modal and low impact transportation.

Policy: The City of Gainesville has a policy of supporting multi-modal and low impact transportation while balancing the costs and potential benefits.

66 Transportation + Mobility

3.4 ENVIRONMENTAL IMPACTS AND ENVIRONMENTAL JUSTICE - MICHAEL

Background: The negative environmental impacts of development, and the growing effects of climate change, disproportionately affect low-income communities and communities of color.

Goal: To create equity in city planning so that Gainesville residents receive the benefits and bear the burdens of development together, equally.

66 Sustainable Development

Policy: When making planning decisions the City of Gainesville will consider what communities will be most affected – both positively and negatively; how to mitigate existing and future environmental impacts for all communities, especially those that have historically carried a greater share of the burden; how to balance environmental protection with the need for investment in underserved areas; and how land use decisions either contribute to or counteract harmful historical development patterns across the city.

4.0 PUBLIC FACING AND FINANCIAL

4.1 EDUCATION PROGRAMS - CARLA

Background: The Utility is a publicly owned entity, but it is difficult for the public to remain informed, specifically regarding the rate plan/GFT functions and its purpose. It is important that the public understands the very important role the GRU plays in the City.

Goal: To educate the community on their collective ownership of the utility and the collection and purpose of the GFT through community events and workshops.

Policy: The City and Utility will work with Community partners to engage with customers in different communities to assist with the design of education materials for each area of our Energy Policy to assure they are easily understood and operational for all customers, and develop hands-on training materials for additional audiences not reachable by online resources.

4.2 RATE PLANNING AND DETERMINATION - CARLA

Background: Rates for utility services charged to residents, businesses and public entities such as Alachua County School Board or the University of Florida should reflect actual the cost of service. Wastewater rate policy is to utilize the winter water usage as a basis for wastewater charges in the remaining months of the year. Costs of service are expected to increase with inflation and with aging infrastructure.

Goal: Design rate changes that are predictable to allow for customers to project their costs and to accurately predict and project energy savings and to present to customers with explanation of increases or savings prior to being proposed to general government

Policy: The Utility should plan incremental adjustments projected outward over five to ten-year periods. Rate changes should be predictable to allow for customers to project their costs and to accurately predict and project energy savings.

The rate stabilization fund should be maintained at a level consistent with good industry practice and should always be used for the purpose intended.

4.3 GENERAL FUND TRANSFER DETERMINATION – BARRY

Background: The City of Gainesville is somewhat unique compared to most cities in that around 60% of the property exempt from paying property taxes. Combining this fact with Florida's legal limits property tax rates reduces the ability of the City to receive funds through property taxes.

The City of Gainesville has many positives, such as excellent parks and cultural events. The City also has several challenges. The largest challenge is the income disparity. At the writing of this policy, the City is ranked in the top five nationally for income disparity.

The General Fund Transfer (GFT) reflects the city's return on their investment in Gainesville Regional Utilities. These funds are important for the City to be able to provide important services to the citizens of Gainesville. However, the GFT also negatively impacts GRU rates which can create a burden on GRU customers – residential, customer, non-profits, etc. Therefore, the Gainesville City Commission has the unenviable task of balancing these two factors.

Historically, the GFT has been highly politicized. This can lead to short-term approaches, such as periods of rates remaining constant or even decreasing when revenues are dropping while expenses are increases by reducing rate stabilization funds to inappropriate levels. These periods are then followed by periods of rapid increase, which is a burden to GRU customers.

Goal: The goal of this quality is to aid the City Commission in balancing the needs to fund City services while not unduly burdening GRU customers – especially our most vulnerable citizens. Both GRU and general government programs that support citizens in need should be emphasized. When possible, rate changes should be more gradual and reflect longer term needs to maintain GRU services and the City's needs. Citizen engagement should be encouraged throughout the budgeting process.

Policy: The GFT shall be determined through the City budgeting process and shall reflect the balanced needs of maintaining GRU services, funding City services, and not unduly burdening GRU customers. City and GRU programs shall be supported to mitigate the impacts of these decisions on the City's most vulnerable citizens.

This does not reflect our current effort to develop a formula.

4.4 CITY/COUNTY RATE DIFFERENTIAL - DON

BACKGROUND: The State of Florida allows a municipal utility to impose a surcharge on the base rate plus usage for delivery of electricity and water services limited to a multiple of the Public Service Fee charged on those services delivered within the boundaries of the municipality. The State of Florida further limits the imposition of a surcharge on electricity to a maximum of 10% of the base rate plus usage. Each municipal utility must submit its surcharge plan to the Public Service Commission for approval.

GOAL: The goal of the City of Gainesville is to support growth outside the city's boundaries subject to recognizing and recovering the higher cost to install and deliver services outside the city's boundaries.

POLICY: The City of Gainesville should continue to recognize and recover the higher cost of delivering utility services by imposing a surtax outside of its boundaries.

4.5 UNIVERSITY OF FLORIDA – WENDELL

Background: The University of Florida is the largest electrical consumer within the Gainesville municipal area and is currently served by Duke Power. Some University units south of Archer Road and in other parts of the county are served by GRU. Electrical consumption on campus represents about 20-25% of GRU's annual electricity production.

Goal: To develop a closer partnership with the University of Florida in an effort to spread the utility's fixed costs over a greater annual generation of electricity and other utilities. This will reduce the overall cost of generation and solidify the stated goals of partnership between the City and UF.

Policy: The City of Gainesville and GRU shall make every effort to become UF's preferred utility provider.

4.6 ECONOMIC DEVELOPMENT - DON

Background: GRU would benefit financially from growth in demand for its utility services. The trade off will be the cost of infrastructure needed to accommodate the increased demand. Those costs should be lower within GRU's existing service areas thus those areas should be the initial focus. On a case-by-case basis GRU may benefit from expanding its existing service areas. It is the policy of the City of Gainesville to encourage economic development efforts by insuring an adequate provision of utilities (water/sewer, electric, gas and broadband) to the community served by each of its utility services and to report on utility capacity and areas where utility service deficits exist.

Goal: GRU has not developed a wide audience when seeking to "tell its story" about reliability and service while maintaining competitive utility rates. GRU would benefit from developing a wider audience through targeting partners who serve the business community such as the economic development offices at chambers of commerce, Alachua County, UF, SFC, CareerSource of North Central Florida, and others. GRU would benefit by receiving input from the economic development partners and by engaging them to become its ambassadors and help "tell its story". Policy: GRU will develop a list of potential economic development partners located within its service area, develop regularly scheduled communication, and encourage non-scheduled input with those partners to insure that it is a proactive participant in economic development.		
5.0 ENVIRONMENTAL AND CLIMATE RELATED		
5.1 CLIMATE DISRUPTION PLANNING AND IMPACTS – BARRY Background: Climate change is expected to bring warmer temperatures, a rise in sea levels, more frequent and severe weather events, and an influx of people from coastal areas of Florida. Goal: The City should prepare for the likely impacts of climate change, including increased requirements for severe weather resiliency and repair and the increased need for utility services. Policy: The City of Gainesville has a policy of planning for the likely impacts of climate change	REFERENCE: ADAPTING TO CLIMATE CHANGE: A GUIDE FOR THE ENERGY AND UTILITY INDUSTRY, BSR	
5.2 FUEL SUPPLY – WENDELL Background: Prudent operations of a utility require a reliable and flexible fuel supply and a diverse stable of generating units that can use these fuels. The ability to use different energy sources or fuels procured from different vendors and/or locales in a fast-changing future is a must. Currently GRU is one of the most fuel diverse utility in Florida. Goal: We should maintain GRU's status as a premier fuel-diverse utility for the near future as we transition to renewable energy. Policy : GRU shall maintain its status as a fuel diverse utility as it transitions to 100% renewable energy by 2045.		

5.3 ENERGY MANAGEMENT - CARLA will become more critical and cost effective as supplies of fuels change and prices fluctuate. Climate variability will increase strains on the electrical grid, both above and below ground. Additionally, the number of heating days and cooling days will change impacting equipment lifespan, cooling process efficiency, and may affect overall system reliability if not managed. Energy management systems must be prioritized in order to meet these challenges.		
5.4 WATER SUPPLY - THERESA Background: It is projected fresh water will be an increasingly limited commodity and consequently be more costly. Goal: To increase the efficiency of the delivery and consumption of natural resources (water) and stay within permitted water capacity. Policy: To promote conservation of this limited resource, GRU will work towards charging the full cost of providing safe, reliable drinking water – not just the cost of treatment and distribution, but correspondingly the cost of instituted conservation measures and anticipated decrease in revenue.		
5.5 ECONOMIC IMPACT OF CONSERVATION MEASURES - THERESA Background: Conservation measures promoted by the implementation of this policy will affect GRU's revenue streams negatively, given the current and traditional business model. Goal: To promote conservation measures while maintaining appropriate revenue streams Policy: GRU and the City of Gainesville will explore alternative utility operational models in order to be able to continue to provide service to their customers in a reliable, safe, environmentally responsible and economically viable way.		