

AGENDA ITEM SUMMARY

January 21, 2020

City Council

STAFF

John Phelan, Energy Services Manager
Tim McCollough, Deputy Director, Utilities Light and Power
Cyril Vidergar, Legal

SUBJECT

Second Reading of Ordinance No. 006, 2020, Making Appropriations for the 2020 Climate Action Plan Mitigation and Resilience Projects and Related Art in Public Places.

EXECUTIVE SUMMARY

This Ordinance, unanimously adopted on First Reading on January 7, 2020 appropriates off-cycle funds to address existing and emerging infrastructure demands and refocused investments in Energy Services programs. This package supports resilience by improving electric system reliability and grid flexibility with additional Distributed Energy Resource (DER) program elements and improving carbon mitigation by directing additional support for commercial-scale solar. The Energy Services elements are a realignment of existing budget, while the Electric Utility distribution system elements can be funded from unspent 2019 reserves. The package focuses on “no regrets” acceleration of planned activities of the Electric Utility Capital Improvement Plan and 2030 climate and energy objectives.

The package’s reliability scope also supports broadband services (3.7 Deploy reliable, high-speed internet) because the work is aligned with FC Connexion deployment as it creates new markets via annexations or pathways via spare conduits to deploy fiber in the electric system. Accelerating this investment is also aligned with the recently published Electric Utility 2019 Capital Improvement Plan and the FC Connexion deployment schedule.

STAFF RECOMMENDATION

Staff recommends adoption of the Ordinance on Second Reading.

ATTACHMENTS

1. First Reading Agenda Item Summary, January 7, 2020 (w/o attachments) (PDF)
2. Ordinance No. 006, 2020 (PDF)

AGENDA ITEM SUMMARY

January 7, 2020

City Council

STAFF

John Phelan, Energy Services Manager
Cyril Vidergar, Legal

SUBJECT

First Reading of Ordinance No. 006, 2020, Making Appropriations for the 2020 Climate Action Plan Mitigation and Resilience Projects and Related Art in Public Places.

EXECUTIVE SUMMARY

The purpose of this item is to approve an off-cycle appropriation package to address existing and emerging infrastructure demands and refocused investments in Energy Services programs. This package supports resilience by improving electric system reliability and grid flexibility with additional Distributed Energy Resource (DER) program elements and improving carbon mitigation by directing additional support for commercial-scale solar. The Energy Services elements are a realignment of existing budget, while the Electric Utility distribution system elements can be funded from unspent 2019 reserves. The package focuses on “no regrets” acceleration of planned activities of the Electric Utility Capital Improvement Plan and 2030 climate and energy objectives.

The package’s reliability scope also supports broadband services (3.7 Deploy reliable, high-speed internet) because the work is aligned with FC Connexion deployment as it creates new markets via annexations or pathways via spare conduits to deploy fiber in the electric system. Accelerating this investment is also aligned with the recently published Electric Utility 2019 Capital Improvement Plan and the FC Connexion deployment schedule.

STAFF RECOMMENDATION

Staff recommends approval of the Ordinance on First Reading.

BACKGROUND / DISCUSSION

Coordinated Planning and Implementation

The electric industry is facing rapid change. Market disruption is happening at a pace not experienced before. Solar photovoltaics (PV) are commonplace and growing at increasing rates each year, battery storage is no longer a thought experiment, and the fastest production car on earth is fully electric and has the capability to drive itself. The City can no longer plan in the traditional way because our former load growth models no longer hold true.

Fort Collins Electric Utility and Energy Services teams are collaborating closer than ever before on planning, implementation and operations in support of the community’s goals of 100% renewable electricity (100RE) in just ten years while maintaining historic reliability and affordability.

This off-cycle budget proposal is a concrete example of this coordination. By bringing forward both customer program and distribution system investment funding proposals together, Utilities is presenting an optimal short-term mix of investment which supports electric system resilience and carbon mitigation. The proposed package focuses on acceleration of planned activities of the Electric Utility 2019 Capital Improvement Plan and 2030

climate and energy objectives as described below.

Electric Utility Proposed 2020 Scope

During the Budgeting for Outcomes (BFO) process for the FY2019/20 budget, there were revisions made in the City Manager's recommended budget to enable the Climate Action Plan (CAP) opportunity package. One area of budget reduction was in the "distribution transformer" BFO offer (offer 8.70) in the amount of \$318,000. As a result, the ability to purchase transformers necessary to support system improvements was suspended by the end of the second quarter of 2019. As part of this appropriation, the request is to first restore the funding to support distribution transformer purchases in 2020, which also supports system replacement projects and proactive outage mitigation activities. Capital projects in the following categories also directly benefit from the proposed appropriation of funds

- High priority electric distribution cable system replacement areas aimed at improving distribution system reliability: As the electric distribution system ages, cable and cable accessory failure rates have increased. Specific areas have been identified for replacement based on probability of future failures, risk, and several other factors. Some of the identified replacement areas that do not have a spare conduit for fiber optic cables offer a synergistic benefit between the Electric Utility and FC Connexion if fiber is pulled in with the replacement power cables.
- Cable diagnostic testing equipment purchase: Thus far, our cable system prioritization efforts have been making use of statistical analysis drawn from past reliability and failure information. With the support from this off-cycle appropriation, we can purchase a cable diagnostic system that has the proven ability to assess the health of an existing circuit. Installed in a proper vehicle that allows access and effective application of the equipment, we can focus our cable system replacement investment based on forward-looking leading predictive maintenance indicators to supplement our statistical predictive failure models.
- Electric distribution system connection for annexation areas: Connecting the electric distribution system to annexed areas also provides an opportunity for FC Connexion to serve those customers via cooperative installation of conduit pathways that must be installed for electric service. These areas include Mail Creek Crossing, Strauss Cabin, Fox Hills, and Blehm Annexations.
- Conversion of overhead electric distribution system areas to underground: Consistent with Fort Collins' legacy and with the City Council's current priority to convert overhead electric lines to underground electric lines, there are nine projects that will replace the remaining overhead distribution lines in the Electric Utility's service territory with underground infrastructure. Work to convert overhead electric distribution areas not only improves electric system reliability, but also allows cooperative installation of conduit pathways for future FC Connexion customers.
- A GIS map with details of the Electric Utility projects can be viewed at <https://arcg.is/SS9ma>

Following the completion of capital projects in the 2019 Light & Power fund, unspent resources in the associated capital accounts have been identified which can be returned to the fund and be appropriated to support additional projects in 2020. Similarly, underspend in system additions and operations and maintenance (O&M) accounts that would otherwise be returned to the electric fund reserves can also be appropriated to support electric system reliability and resiliency. The projects detailed above total \$6.22 million, with currently budgeted and appropriated funds providing for all but a \$3.10 million gap.

Appropriating funds for the identified capital projects allows for better definition of the offers for the 2021/2022 BFO process. If funds returned to reserves are not appropriated, staff must prioritize the projects, putting the higher priority replacement projects completed under funds already appropriated for 2020 and the remaining projects identified for funding in the 2021/2022 BFO cycle. As the unspent amounts in the Electric Utility and Energy Services accounts represents enough to support all projects described here, this proposal truly does represent a "no regrets" opportunity to support system reliability and resilience.

Energy Services 2020 Funding Summary

During the BFO process for the FY2019/20 budget, there were revisions made in the City Manager's recommended budget to enable a scaled-down Climate Action Plan (CAP) opportunity package. In this package, "commercial solar rebates" (Offer 9.92) was funded at \$125,000 annually (25% of the original offer amount). As part of this proposed appropriation, the 2020 commercial solar funding would be 73% of the original 2019/20 BFO offer amount.

The following summarizes the external factors which drive the opportunity for maximizing benefit in 2020 with changes in Energy Services programs.

- Increase in energy efficiency funding from Platte River (\$390k); Platte River's proposed 2020 budget for efficiency and demand side management is increasing to reflect their commitment to reach higher levels of savings. Fort Collins Utilities receives the load ratio share of these funds. This budget will result in an increase of approximately \$390k for Fort Collins common efficiency programs. This increase in Platte River 2020 funding will "offset" an equivalent amount of funds from the approved 2020 budget (offers 9.80 and 9.90).
- Large-scale solar projects not moving forward (\$240k): Several incentives for large scale commercial solar projects were committed in 2018 and carried over into 2019 via purchase order. Customers have recently notified Utilities that these projects are not moving forward due to various issues. The total incentive amount is \$240k. At the same time, staff has committed all of the 2019 funding and is tracking pending applications which will exceed current 2020 funding.
- Solar Power Purchase Program (SP3) (\$150k): 2019 funding for the SP3 included a mid-year anticipated start date of a new large system. Due to solar module federal tariffs and related delivery issues, the system was commissioned in mid-November. As a result, approximately \$150k of scheduled expenditures did not occur in 2019.
- Overall efficiency programs (\$1.5M): 2019 efficiency programs are on track for achieving savings targets but are currently forecast to meet the annual goals with a financial balance of approximately \$1.5M. This is primarily due to lower participation in business efficiency and shifts in 2019 funding under Efficiency Works with Platte River.

Energy Services 2020 Proposed Scope

Priorities for Energy Services with regards to 2020 are to leverage customer interest in distributed solar to meet the 2020 Energy Policy local renewable energy target and to lay the groundwork for 2030 energy and climate goals with customer offers related to grid flexibility and beneficial electrification.

The following projects are proposed for implementation in 2020.

- Appropriation of 2019 commercial solar funds for 2020 commercial solar projects, \$240k. This would bring the 2020 commercial solar incentive budget up to \$365k. The 2019 commercial solar incentives budget (\$125k) is fully committed to customer projects. Staff has project intent affidavits from multiple customers for 2020 for a total of \$180k of incentives and active inquiries from an additional eight customers which could total over \$360k in incentives.

These solar projects will add approximately one megawatt of solar capacity, directly reduce carbon emissions by up to 800 metric tons starting in 2021 and support reaching the Energy Policy 2020 renewable energy target of 20 megawatts of local solar.

- Realignment of 2020 activities under existing Offers 9.80 and 9.90. Approved 2019/20 BFO offers 9.80 and 9.90 included incentives which will receive additional support from Platte River in 2020. The new funding from Platte River allows for the redeployment of 2020 resources without changing Utilities funding levels. The following projects will be included for 2020 and any ongoing costs will be incorporated into existing funding levels for 2021/2022:
 - Addition of Ecobee thermostats to the Bring Your Own Thermostat (BYOT) offer under the Peak

- Partners program. This will add the third most popular installed thermostat brand to the BYOT program (complementing Nest and Honeywell). 150 units would be added with a first-year cost of \$65,000 through the existing vendor Itron. Ongoing costs will be incorporated into the 2021/2022 demand energy resources management offer.
- Demonstration of Grid Interactive Water Heaters (GIWH). Up to 20 GIWH would be installed in low income customer premises at no cost to the customer. The units will prioritize heat pump water heater technology wherever possible but may include some resistance units based on customer home characteristics. This project will test options for transitioning 3G cellular communications, streamline the business processes needed for the field deployment of future units, provide a storage platform for storing excess renewable electricity and demonstration of optimal control strategies. This project will be delivered in partnership with Itron for a cost of \$130k.
 - Residential Battery Storage Demonstration. This project will engage existing battery customers with incentives for allowing utility monitoring and potentially control of behind the meter battery asset, install several residential behind the meter batteries for management by Utilities and pilot an incentive for combining batteries with solar. This project will be delivered by existing Energy Services staff with a budget in 2020 of \$100k.
 - Development of Carbon-Based Incentive Structure. This project will provide funding for a collaborative effort with Sacramento Municipal Utilities District (SMUD) to customize a framework for carbon-based incentives for efficiency, distributed generation and electrification. This framework will support the transition of incentives for reducing loads, increasing loads and shaping loads to a common carbon metric. A preliminary cost estimate for this project is \$25k.
 - Expansion and coordination of Beneficial Electrification Incentives. This project will provide initial funding to expand and coordinate beneficial electrification incentives, specifically targeting customer and trade ally requirements to advance installation of heat pumps for space and water heating to reduce both natural gas and electric resistance use. This project will be delivered by existing Energy Services staff with a budget in 2020 of \$70k.

Redeployment of approved 2020 Energy Services funds and appropriation of commercial solar funds allows for improved definition of offers for the 2021/2022 BFO process. Without this realignment, it is likely that existing efficiency funds will not be fully utilized in 2020 and that priority changes towards grid flexibility and beneficial electrification requests will be postponed to 2021.

CITY FINANCIAL IMPACTS

The source funding is described in Attachment One and includes the remaining balance from several completed capital projects and 2019 underspend in operations for the Electric Utility and Energy Services. During the previous Budgeting for Outcomes process, the forecasted Electric Utility available reserves at the end of 2019 was \$5.5M. The projected level of Electric Utility available reserves is \$10.5M. This appropriation and redeployment of funds totals \$3.73M. As such, the Electric Utility reserves will remain at a higher level than originally forecast.

The funding described above results in the following specific items in the Ordinance:

- Increase in System Improvements and Replacements (parent account 501012) by \$1,921,249.
- Increase in Annexations (parent account 501004) by \$268,585.
- Increase in System Conversions (parent account 501601) by \$909,925.
- Net reduction in Energy Services efficiency funding (business unit 13000000) by \$295,000. This will be offset by increased funding from Platte River.
- Increase in Community Renewables funding for commercial solar incentives and for battery storage demonstration (business unit 11110000) by \$340,000. This is funded from expiring purchase orders for past solar projects and from associated reductions in Energy Services.

- Increase in Demand Response funding for thermostats and grid interactive water heaters (business unit 135000000) by \$195,000. This is funded from associated reductions in Energy Services.

In addition to the financial impacts of the Electric Utility and Energy Services projects described above, some parts of this appropriation request meet the eligibility requirements for a 1% contribution to the City's Art in Public Places (APP) program. Of the \$3.73M being requested for appropriation, \$1,637,759 is eligible for the 1% contribution to APP, increasing the total appropriation request by \$16,379. The portion of the \$3.73M that is not eligible for an APP contribution (\$2,092,000) is made up of the Energy Services programs (\$630,000), and 3 of the 'System Improvements & Replacements' related expenditures proposed by the Electric Utility (\$1,462,000). The total appropriation requested, including the APP contribution, is \$3,746,137. See below for the financial impact of the APP contribution.

Total Appropriation Request for Electric Utility & Energy Services Projects:	\$3,729,759
Less: Projects Ineligible for an APP Contribution*:	\$2,092,000
<i>Energy Services (All Projects Ineligible)</i>	<i>\$630,000</i>
<i>Distribution Transformer Replacements</i>	<i>\$318,000</i>
<i>Distribution Transformer Purchases for Off-Cycle Projects</i>	<i>\$1,002,000</i>
<i>Cable System Diagnostic Test Equipment with Vehicle</i>	<i>\$142,000</i>
Remaining Amount Eligible for an APP Contribution:	\$1,637,759
<i>Total APP (Artwork, Operations, & Maintenance) – 1% of Eligible Amount</i>	<i>\$16,379</i>
Total Appropriation (Including APP Contribution):	\$3,746,138

*These projects do not constitute "Capital Construction" under the City Code.

BOARD / COMMISSION RECOMMENDATION

At its December 12, 2019 meeting, the Energy Board unanimously supported this proposed set of projects and funding levels.

ATTACHMENTS

1. Financial Summary (PDF)
2. Energy Board Minutes, December 12, 2019 (draft) (PDF)

ORDINANCE NO. 006, 2020
OF THE COUNCIL OF THE CITY OF FORT COLLINS
MAKING APPROPRIATIONS FOR THE 2020 CLIMATE
ACTION PLAN MITIGATION AND RESILIENCE PROJECTS
AND RELATED ART IN PUBLIC PLACES

WHEREAS, Fort Collins Electric Utility and Energy Services teams collaborate closely on planning, implementation and operations in support of community Climate Action Plan (CAP) goals, including 100% renewable electricity (100RE) in ten years, while maintaining the City's historic reliability and affordability; and

WHEREAS, during the 2019/20 Budgeting for Outcomes (BFO) process, portions of the CAP opportunity package were revised, including reduction to the "distribution transformer" offer (Offer 8.70), which required deferment of certain planned Electric Utility transformers purchases, and reduction of "commercial solar rebates" (Offer 9.92), which limited the rebates to 25% of program forecasts; and

WHEREAS, Electric Utility staff has identified unspent resources in the Light & Power fund following completion of 2019 capital projects, which monies are available for redeployment to support projects in 2020, including accelerating transformer replacement deferred after revision of Offer 8.70 and issuing additional commercial solar rebates curtailed after revision of Offer 9.92; and

WHEREAS, staff similarly has identified unspent resources in system additions and operations and maintenance (O&M) accounts that are also available for appropriations to support electric system reliability and resiliency; and

WHEREAS, staff has identified over \$6,000,000 in electric system improvements that can be completed in 2020 through redeployment of \$3,729,759 of unspent 2019 Light & Power reserves, the locations for which are depicted on a GIS map posted on the Utility Services website, including the following:

- electric distribution cable system replacements to improve distribution system reliability;
- cable diagnostic testing equipment;
- electric distribution system connection for Mail Creek Crossing, Strauss Cabin, Fox Hills, and Blehm annexation areas; and
- conversion of overhead electric distribution system areas; and

WHEREAS, staff also recommends appropriating a portion of the unspent funds toward Energy Services projects that advance the City's 2020 Energy Policy, including the following:

- enhancing the commercial solar incentive budget (bringing the total to \$365,000), to address received 2020 project affidavits and develop eight additional sites, adding up to one megawatt (MW) of capacity toward the 2020 Energy Policy 20 MW local solar target;

- realigning 2020 activities to leverage Platte River Power Authority funding to enhance Bring Your Own Thermostat offers, installing Grid Interactive Water Heaters in low income customer premises, engaging battery customers, collaborating with peer utilities to customize carbon-based incentives, and expanding electrification incentives; and

WHEREAS, the proposed redeployment of 2019 Light & Power Fund reserves benefits Electric Utility ratepayers, as required by Article XII, Section 6 of the City Charter, by leveraging existing resources to complete distribution system renewals and replacements to improve overall system reliability and resiliency in the current budget cycle, rather than postponing such system enhancements; and

WHEREAS, this appropriation further benefits Electric Utility ratepayers, as required by the City Charter, and serves the utility purpose of enabling distribution system enlargements and betterments to improve overall grid flexibility and beneficial electrification for all customer rate classes, in tandem with the public purpose of retiring carbon-based energy reliance in alignment with community CAP goals; and

WHEREAS, in 1995, the City Council adopted Article XII of City Code Chapter 23 to establish a program to acquire, exhibit and maintain art in public places, to be funded by contributions in Council appropriations for capital projects, including those by its utilities, equal to 1% of project construction costs; for the City's utilities this contribution is capped at a total of .5% of each utility's "budgeted operating revenue" (the "APP Ordinance"); and

WHEREAS, this project involves construction estimated to cost more than \$250,000, as such, Section 23-304 of the City Code requires one percent of the eligible appropriations to be transferred to the Cultural Services and Facilities Fund for a contribution to the Art in Public Places (APP) program; and

WHEREAS, contributions to Art in Public Places for each Utility is kept and spent in such Utility's own fund, except for maintenance, administration, repair and display costs pursuant to City Code Section 23-303; and

WHEREAS, the APP Ordinance requires this appropriation to include a 1% contribution for Art in Public Places on only the eligible portion (\$1,637,759) of the total appropriated amount (\$3,729,759) resulting in a total APP appropriation of \$16,379, allocated between artwork and operation and maintenance; and

WHEREAS, Article V, Section 9 of the City Charter permits the City Council to appropriate by ordinance at any time during the fiscal year such funds for expenditure as may be available from reserves accumulated in prior years, notwithstanding that such reserves were not previously appropriated; and

WHEREAS, the City Manager has recommended the appropriation described herein and determined that this appropriation is available and previously unappropriated from the Light & Power Fund and will not cause the total amount appropriated in the Light & Power Fund to exceed the current estimate of actual and anticipated revenues to be received in that fund during any fiscal

year; and

WHEREAS, Article V, Section 10, of the City Charter authorizes the City Council to transfer by ordinance any unexpended and unencumbered appropriated amount or portion thereof from one fund or capital project to another fund or capital project, provided that the purpose for which the transferred funds are to be expended remains unchanged; the purpose for which the funds were initially appropriated no longer exists; or the proposed transfer is from a fund or capital project in which the amount appropriated exceeds the amount needed to accomplish the purpose specified in the appropriation ordinance; and

WHEREAS, in accordance with Article V, Section 10 of the City Charter, the appropriation of reserves for the Project from the Light & Power Fund and the transfer of a portion of those unexpended and unencumbered appropriated funds to the APP program established by City Code Section 23-304(a) will be used for Light & Power purposes and improvements in connection with the Project.

NOW, THEREFORE, BE IT ORDAINED BY THE COUNCIL OF THE CITY OF FORT COLLINS as follows:

Section 1. That the City Council hereby makes and adopts the determinations and findings contained in the recitals set forth above.

Section 2. That there is hereby appropriated for expenditure from prior year reserves in the Light & Power Fund the sum of THREE MILLION SEVEN HUNDRED FORTY-SIX THOUSAND ONE HUNDRED THIRTY-EIGHT DOLLARS (\$3,746,138) for 2020 Climate Action Plan Mitigation and Resilience Projects and appropriated therein as follows:

• 2020 Climate Action Plan Mitigation & Resilience Projects	\$3,729,759
• Art in Public Places Project (Artwork)	12,775
• Art in Public Places Project (transfer to Cultural Services Fund for APP Operations)	3,276
• Art in Public Places Project (transfer to Cultural Services Fund for APP Maintenance)	328
TOTAL	<hr/> \$3,746,138

Section 3. That the unexpended appropriated amount of THREE THOUSAND TWO HUNDRED SEVENTY-SIX DOLLARS (\$3,276) in the Light & Power Fund is authorized for transfer to the Cultural Services and Facilities Fund and appropriated therein for the Art in Public Places Program Operations.

Section 4. That the unexpended appropriated amount of THREE HUNDRED TWENTY-EIGHT DOLLARS (\$328) in the Light & Power Fund is authorized for transfer to the Cultural Services and Facilities Fund and appropriated therein for the Art in Public Places Program Maintenance.

Introduced, considered favorably on first reading, and ordered published this 7th day of January, A.D. 2020, and to be presented for final passage on the 21st day of January, A.D. 2020.

Mayor

ATTEST:

City Clerk

Passed and adopted on final reading on the 21st day of January, A.D. 2020.

Mayor

ATTEST:

City Clerk