Recommendation F3

Inventory/Property/Equipment

In this finding, please find the following:

a. Inventory/Property/Equipment
    1. DCHA ECIP 2 Remaining Mechanical Energy Savings Projects
    2. Memo- EPC Evaluation for Refinancing and RAD Conversions

DCHA hired the consulting firm R. Sissick Consulting LLC to evaluate and analyze the program, the firm released its final report on March 4th, 2022. The work plan was prepared by the Office of Capital Programs team to expend the remaining funds of ECIP Phase II and complete the installation of equipment by November 2023.

DCHA ECIP 2 Remaining Mechanical Energy Savings Projects

Property Name	Tranche	Total Energy Mechanical conservation measures	Notes
Benning Terrace	1	$ 2,700,000	High Efficiency Furnaces and DHW Heater Replacement
Garfield Terrace Senior	1	$ 228,000	Replace Refridgerators with Energy Star
Carroll	1	$ 60,000	Replace Refridgerators with Energy Star
LeDroit	1	$ 16,000	Replace Refridgerators with Energy Star
Kelly Miller	1	$ 160,000	Replace Refridgerators with Energy Star
Benning Terrace	1	$ 274,000	Replace Refridgerators with Energy Star
Stoddert	1	$ 158,000	Replace Refridgerators with Energy Star
Regency House	1	$ 160,000	Replace Refridgerators with Energy Star
Knox Hill	1	$ 122,000	Replace Refridgerators with Energy Star
James Apartments	1	$ 141,000	Replace Refridgerators with Energy Star
Claridge	1	$ 343,000	Replace Refridgerators with Energy Star
Kentucky	1	$ 118,000	Replace Refridgerators with Energy Star
Horizon	1	$ 124,000	Replace Refridgerators with Energy Star
Stoddert	1	$ 151,680	Replace Toilets with 1.2 GPF
Benning Terrace	1	$ 263,040	Replace Toilets with 1.2 GPF
James Apartments	1	$ 135,360	Replace Toilets with 1.2 GPF
LeDroit	1	$ 15,360	Replace Toilets with 1.2 GPF
Garfield Terrace Senior	1	$ 218,880	Replace Toilets with 1.2 GPF
Knox Hill	1	$ 117,120	Replace Toilets with 1.2 GPF
Kentucky	1	$ 113,280	Replace Toilets with 1.2 GPF
Kelly Miller	1	$ 153,600	Replace Toilets with 1.2 GPF
Regency House	1	$ 153,600	Replace Toilets with 1.2 GPF
Carroll	1	$ 57,600	Replace Toilets with 1.2 GPF
Horizon	1	$ 119,040	Replace Toilets with 1.2 GPF
Woodland Terrace	2	$ 2,400,000	High Efficiency Boilers and DHW Heater Replacement
Sibley Plaza	2	$ 224,000	Replace Refridgerators with Energy Star
Ft Lincoln	2	$ 120,000	Replace Refridgerators with Energy Star
Langston Terrace	2	$ 274,000	Replace Refridgerators with Energy Star
Woodland Terrace	2	$ 234,000	Replace Refridgerators with Energy Star
Sibley Plaza	2	$ 1,300,000	Replace Roofing and install R-22 insulation
Woodland Terrace	2	$ 224,640	Replace Toilets with 1.2 GPF
Langston Terrace	2	$ 263,040	Replace Toilets with 1.2 GPF
Ft Lincoln	2	$ 115,200	Replace Toilets with 1.2 GPF
Sibley Plaza	2	$ 215,040	Replace Toilets with 1.2 GPF
Sibley Plaza	2	$ 1,800,000	Replace Windows with Triple-Pane Low-E
Repla	2	$ 3,230,000	VRF HVAC system conversion
James Creek	3	$ 1,113,200	Heat Pump Water Heater Replacement
Harvard	3	$ 193,000	Replace Refridgerators with Energy Star
James Creek	3	$ 242,000	Replace Refridgerators with Energy Star
Ft Dupont	3	$ 104,000	Replace Refridgerators with Energy Star
Syphax Gardens	3	$ 174,000	Replace Refridgerators with Energy Star
Lincoln Road	3	$ 19,000	Replace Refridgerators with Energy Star
Syphax Gardens	3	$ 167,040	Replace Toilets with 1.2 GPF
Harvard	3	$ 185,280	Replace Toilets with 1.2 GPF
Ft Dupont	3	$ 852,000	Replace Toilets with 1.2 GPF
James Creek	3	$ 232,320	Replace Toilets with 1.2 GPF
Lincoln Road	3	$ 18,240	Replace Toilets with 1.2 GPF
Tranche 3 TOTAL		$ 6,102,560	$ 3.30
Tranche 1 TOTAL		$ 10,399,920	$ 6.10
Tranche 2 TOTAL		$ 3,300,080	$ 10.40
Grand Total		**$ 19,820,800**	$ -

DCHA ECIP 2 Remaining Mechanical Energy Savings Projects

Property	Tranch	Units	Toilets	Refrigerator
			960	1000
Benning	1	274	$ 263,040	$ 274,000
Carroll	1	60	$ 57,600	$ 60,000
Claridge	1	343		$ 343,000
Ft Dupont	3	104	$ 99,840	$ 104,000
Ft Dupont Addition	3	19	$ 18,240	$ 19,000
Ft Lincoln	2	120	$ 115,200	$ 120,000
Garfield Terrace Senior	1	228	$ 218,880	$ 228,000
Greenleaf Senior	3	215	$ 206,400	$ 215,000
Harvard	3	193	$ 185,280	$ 193,000
Horizon	1	124	$ 119,040	$ 124,000
James Apartments	1	141	$ 135,360	$ 141,000
James Creek	3	242	$ 232,320	$ 242,000
Kelly Miller	1	160	$ 153,600	$ 160,000
Kentucky	1	118	$ 113,280	$ 118,000
Knox Hill	1	122	$ 117,120	$ 122,000
Langston Terrace	2	274	$ 263,040	$ 274,000
LeDroit	1	16	$ 15,360	$ 16,000
Lincoln Road	3	19	$ 18,240	$ 19,000
Regency House	1	160	$ 153,600	$ 160,000
Sibley	2	224	$ 215,040	$ 224,000
Stoddert	1	158	$ 151,680	$ 158,000
Syphax Gardens	3	174	$ 167,040	$ 174,000
Woodland Terrace	2	234	$ 224,640	$ 234,000
		3722	$ 3,243,840	$ 3,722,000
Tranch 1			$ 1,498,560	$ 1,904,000
Tranch 2			$ 817,920	$ 852,000
Tranch 3			$ 927,360	$ 966,000

DCHA ECIP 2 Remaining Mechanical Energy Savings Projects

1	Benning Terrace
1	Carroll Apartments
1	Claridge Towers
1	Garfield Terrace
1	Highland Addition
1	Horizon House
1	James Apartments
1	Judiciary House
1	Kelly Miller
1	Kentucky Courts
1	Knox Hill
1	LeDroit
1	Park Morton
1	Stoddert Terrace
2	Fort Lincoln
2	Langston Terrace
2	Langston Addition
2	Sibley Plaza Senior
2	Woodland Terrace
3	Fort Dupont
3	Fort Dupont Addition
3	Greenleaf Senior
3	Harvard Towers
3	Highland Addition
3	James Creek
3	Lincoln Road
3	Regency House
3	Syphax Gardens

M E M O R A N D U M

to: Thor Nelson

from: Rich Sissick, R. Sissick Consulting, LLC

subject: Energy Performance Contract(s) Evaluation for Refinancing and RAD Conversions

date: Friday, March 4, 2022

Based a detailed analysis of DCHA's current Energy Capital Improvement Plan ("ECIP") program and input provided by Authority staff, we have the general outline of an ECIP action plan that will optimize financial benefits, minimize costs, and mitigate conflicts with wider Authority objectives. Significant concerns remain, but they will only be resolvable in the course of implementation. Regardless of how these remaining issues are resolved, the larger fundamentals of the action plan are sound.

- ECIP work should be suspended,
- The proceeds of all ECIP financing transactions currently being held in restricted reserves should be used to pay-down outstanding debt and the remaining principle should be refinanced.

Authorization for EICP program activity is included in Section A1 of Attachment D to the Authority's Moving to Work ("MTW") agreement:

> The Agency may, without prior approval from the Department, modify the current energy performance contract or enter into new performance contracts with Energy Service Companies (ESCos), also called Energy Service Agreements (ESAs), and determine the terms and conditions of energy performance contracts, provided that, with respect to each contract, (i) the term does not exceed 20 years, and (ii) and the Agency maintains adequate file documentation demonstrating EPC performance. The Agency may also function as its own ESCo, provided that any financing complies with requirements (i) and (ii) of this paragraph. However, <u>in agreeing to forego said prior approval, the Agency agrees that no security interest or physical encumbrance shall be placed on public housing property or public housing assets as part of any modified or future performance contract. If such a security interest or physical encumbrance is proposed, the Agency shall seek prior approval from the Department for said performance contract</u>.

The current program was not subjected to HUD Energy Branch review and approval, the banks that financed the program did make UCC filings, so security interests have been established. In addition to creating a HUD/MTW compliance issue, these liens could impede unit demolition or disposition, including those associated with RAD conversion. For these reasons alone, DCHA should immediately stop expending EPC financing proceeds and work to secure the release of all liens. However, there are other compelling reasons to pursue repayment and refinancing.

Project Costs

To fund ECIP Phase 2, DCHA borrowed ~$85.8 million at an interest rate of 4.05% in March of 2018. Of this total, more than $48 million is unspent. In 2022, interest expense will exceed $2.4 million, and approximately $1.4 million of this can be attributed to unspent funds. Bank of America has presented a re-financing proposal / term sheet to DCHA that includes a rate of 2.76% and a 5-month rate lock. Based on the current financing term, paydown the current debt and refinancing the remaining balance would reduce 2022 interest expense by more than $1.8 million and total annual debt service by ~$7 million.

Project Savings

Based on a detailed analysis of the 2020 request for operating funds, the ECIP program incentives produced a subsidy benefit of approximately $10.2 million. Debt service in 2020 was ~$9 million, so project savings do significantly exceed costs, despite the fact that a significant amount of Phase 2 work is not finished. Current ECIP savings are attributable to work completed in Phase 1 back in 2009 and Phase 2 measures that are installed. The remaining Phase 2 work will impact water/energy use but is designed to meet perceived capital needs.

Next Steps -

I strongly recommend executing the term sheet provided Bank of America ("BoA"). Signing a term sheet will not obligate the Authority to refinance with BoA, but it will kick off the collaborative effort needed to design a sound financing plan. Commensurately, DCHA should engage with the HUD Energy Branch or other appropriate HUD staff. Before the new financing transaction is finalized, there are a number of concerns to address.

- Collateralization – Resolution of the existing MTW compliance issue requires that all liens filed against public housing assts are released. Paying off the existing EPC debt will facilitate this, but new financing will require collateralization. Normally, BoA collateralizes EPC dept with EPC equipment. However, they have expressed willingness to accept other forms of collateral that the Authority is able to provide.
- EPC savings and the "75% Rule" – The EPC authorization language included in the MTW agreement lacks the detail needed to address a critical concern. Normally, HUD requires that 75% of EPC savings are used to meet program costs annually. Program costs typically take the form of debt service. The question for HUD is: Does this rule apply to DCHA, since the EPC is a component of the MTW program?
    - If the 75% rule does not apply, the remaining EPC principle should be amortized over the current loan term to maximize the substantial subsidy benefit currently being realized.
    - If the 75% rule does apply, is it necessary to meet this cost threshold with debt service?
        - If debt service is required, the term of the refinancing could be shorted to meet the cost target. This acceleration of debt repayment will result in full repayment in about two years. Once the debt paid off the program would end, and the subsidy benefit would evaporate. However, the collateralization issue would be resolved, and the Authority would have two years to design a new EPC phase. As long as the new Phase is financed in time, the subsidy benefit could be preserved.
        - If debt service is not required, can excess savings be used? To capture savings, EPC expenditures most initially be made using non-federal funds. This is why financing is