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Maryland Department of Housing and Community Development
Secretary Kenneth C. Holt

CHANGING Maryland *for the Better*

DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT

Multi-family Energy Efficiency Housing Affordability MEEHA

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MULTI-FAMILY ENERGY EFFICIENCY AND HOUSING AFFORDABILITY PROGRAMS

Multi-family Energy Efficiency and Housing Affordability (MEEHA I) 2009 – 2011

- Federal Department of Energy (DOE) State Energy Program (SEP)
- Regional Greenhouse Gas Initiative (RGGI) Maryland Strategic Energy Investment Fund (SEIF)

MD BeSMART Multi-family Program 2011 – Present

- Federal Department of Energy (DOE) Energy Efficiency and Conservation Block Grant Program (EECBG)

EmPOWER Maryland (MEEHA II) 2012 – Present

- Participating Utility Rate Payer funded

Customer Investment Fund 2014 - Present

- Exelon-Constellation merger

MARYLAND DHCD

- DHCD also is the Housing Finance Agency for the State of Maryland
- $1.5 billion portfolio of multi-family loans to over 400 developments
- Strong working relationship with Developers and property owners
- Strong understanding of complex financing instruments
- Existing 30 year experience and funding for energy efficiency measures

CREATING OWNER INCENTIVE

- Qualified Allocation Plan – Low Income Housing Tax Credits
  - Requires rehabilitation projects to achieve at least 15% savings from post rehabilitation
  - The availability of energy efficiency funds provides the vehicle to require projects to be more energy efficient at minimal cost to owners
  - Applications are scored through a competitive process. Projects achieving higher savings receive more points
  - Every project submitted for financing is evaluated for energy efficiency funding
- Energy audit requirements are the same for all multi-family programs for ease of use and application of energy efficiency funding
- An energy efficiency audit firm must be part of the initial development team

MEEHA I (2009)

- Developed as a partnership between the Maryland Energy Administration (MEA) and the Maryland Department of Housing and Community Development (DHCD)
- $9.5 million over three years
- MEA provided the technical training and guidance for DHCD staff and review of the plans and specification
- Energy audits were not initially required

MEEHA I

- Project by Project Energy Analysis submission
  - Analyzed energy efficiency specifications
  - Verified by MEA
  - Funded measures predicting positive Savings to Investment Ratio (SIR
- Construction progress inspections completed jointly by DHCD construction inspectors and MEA technical staff
- Consciously designed to incorporate flexibility with building owners
- Provided funds as grants and loans for energy efficiency projects predicting an overall project Savings to Investment Ratio (SIR) greater than 1.1 and CER 10

MEEHA I

- Created strong and clear separation to ensure that funds went only to energy efficiency versus filling equity gaps in financing
- Identified that despite credentials, projected savings from analysis provided by engineers and architects were seriously flawed and inconsistent
- Deep energy retrofit
  - 50% reduction in bills, year over year
  - Identified significant problems with understanding of energy efficiency by top engineers, contractors and architects
  - Identified issues related to permitting and cost containment

MEEHA I RESULTS

- Significant impact on new construction and retrofit projects
- 48 projects consisting of 5,184 units
- Total awards: $8,885,407
- Average residential household expected to save over $500 annually on utility bills
- Savings kWh (unverified): 26,615,787
  (savings based on project engineer/architect submitted analysis)
- Savings Therm (unverified): 359,085
  (savings based on project engineer/architect submitted analysis)

MEEHA I – A LOOK BACK

- Identified different projects required different funding: loan/grant
- Expanded beyond the DHCD portfolio
- Identified need for "Best Practices" for consistency with energy analysis
  - Implemented energy audits with building simulation
- Significant learning curve for DHCD staff
  - DHCD needed knowledgeable and experienced staff

MEEHA II (2012)

- EmPOWER Maryland
  - EmPOWER is the Maryland State program which aimed to reduce energy consumption by 20% by 2015
  - Funded through a utility rate payer surcharge
  - Requires a low income program component
  - DHCD submitted a proposal to the Maryland Public Service Commission which was awarded December 2011 for implementation in 2012

- Proposal focused on the following:
  - Consistent guidelines and measures Statewide due to the existing DOE Weatherization Program
  - Alignment with application intake process
  - Consistent reporting
  - Relationship with a large network of property owners
  - Ability to develop a Maryland-centric process

MEEHA II

- Maryland Public Service Commission awarded DHCD $12.5 million from 2012-2014
- Work was generally restricted to individually metered electric heated/air conditioned tenant based units
- Allowance of up to 15% of project funding for common areas
- Minimum SIR of 1.1 for the overall project
- 2012 IECC resulted in a major reduction in eligibility for funds for new-construction

MEEHA II CHALLENGES

- Tenant sign-off for utility consumption
- Obtaining utility usage
  - Privacy concerns
- Business Structures and complexity
- EmPOWER time constraints (3 Years)
  - Multi-family projects can take 18-36 months to complete the underwriting and construction process
- DHCD qualified staffing

MEEHA II - CHALLENGES CONTINUED

- Education and communication related to understanding the affordable housing industry by utility partners and Public Service Commission Staff and other stakeholders
- EmPOWER – a new arena
  - Historically, utilities provided energy efficiency programs
  - DHCD is the odd man out as both a state agency and new implementer
    - Utilities have a historical comradery
    - Language, metrics, evaluation, and performance is utility centric
    - DHCD is unfamiliar with industry terminology and requirements
    - Learn as you go - Few rules are written but many unwritten "rules" exist

MEEHA II CHALLENGES - CONTINUED

- Limited improvements (15%) to Common areas
  - Missing opportunities while on-site
- Lack of consistency
  - Guidance did not provide specific enough direction
  - Too many building simulation tools allowed
- Territorial and Fuel usage limitations
  - EmPOWER is limited to the service territories of the five (5) participating Utilities
  - Only one (1) participating utility also provides gas
- Initial concern for Free Ridership: The perception that properties are getting free work for work they would have done themselves anyway

MEEHA II

- Continued to develop "Best Practices"
  - DHCD's Multi-Family Energy Audit Guide
    - Developed with the Newport Partners
  - Introduced requirement to follow BPI standards modified for Maryland's needs
  - Created an Auditor Qualification Form
  - Hired qualified in-house technical staff
- Reduced number of accepted Audit building simulation tools to four (4)
  - RemRate
  - Treat
  - EAQuip
  - e-Quest
- DHCD pre-application project review
  - Pre-Qualify the buildings
  - Identify potential strengths and challenges in the buildings
  - Provide guidance to building owners, architects and auditors
  - Familiarize DHCD staff to the project

MEEHA II – PROGRAM IN REVIEW

- Improve communication with stakeholders
- Be involved with the process
  - Attend meetings
  - Ask questions
  - Drive the program or be driven
- Provide flexibility but get what you need
- Develop clear guidance
- Create consistency
  - Deliver consistent guidance
  - Deliver consistent messages

MEEHA II
2012 - 2014 RESULTS

- Projects: 41
- Units: 3,543
- Benefits: $7,772,466
- Savings kWh: 6,807,543
- Savings Therm: 134,096

MEEHA II – CONTINUED 2015

- Public Service Commission approved DHCD's three (3) year continuation application and approving access to Commercial and Industrial (C&I) surcharge funds for non-master metered buildings.
  - $15.0 million Residential benefits
  - $5.0 million Commercial benefits

MEEHA II
2015 – 2017 PROJECTED RESULTS

- Projects: 73
- Units: 6,606
- Benefits: $20,000,000
- Savings kWh: 15,872,000

CUSTOMER INVESTMENT FUND

- Focus on master metered buildings
- All fuel sources including water
- Two components
  - Portfolio Retrofit
    - » Energy efficiency at refinance or as retrofit
  - One-Stop-Shop
    - » Retrofit only
    - » Property owners have a single point of contact to help manage the retrofit
- Building Operator Training

FOR MORE INFORMATION

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