STATE OF CONNECTICUT

DEPARTMENT OF ENERGY AND ENVIRONMENTAL PROTECTION
PUBLIC UTILITIES REGULATORY AUTHORITY
TEN FRANKLIN SQUARE
NEW BRITAIN, CT 06051

DOCKET NO. 11-10-03 PURA REVIEW OF THE CONNECTICUT ENERGY EFFICIENCY FUND'S GAS CONSERVATION AND LOAD MANAGEMENT PLAN FOR 2012

January 4, 2012

By the following Directors:

John W. Betkoski, III
Kevin M. DelGobbo
Anna M. Ficeto

DECISION

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DECISION

I. INTRODUCTION

A. SUMMARY

In this Decision, the Public Utilities Regulatory Authority, formerly known as the Department of Public Utility Control, approves the Connecticut Energy Efficiency Fund's Gas Conservation and Load Management Plan for 2012 with modifications.

B. BACKGROUND OF THE PROCEEDING

Pursuant to §16-32f of the General Statutes of Connecticut (Conn. Gen. Stat.), the natural gas local distribution companies (LDCs) are required to submit annually to the Public Utilities Regulatory Authority (Authority) a gas conservation plan to implement cost-effective energy conservation programs and market transformation initiatives. The LDCs and the Energy Efficiency Board (EEB), formerly known as the Energy Conservation Management Board, shall advise and assist each gas company in the development and implementation of the plan submitted under subsection (b) of this section. Each program contained in the plan shall be reviewed by each gas company and shall be either accepted, modified or rejected by the EEB before submission to the Authority for approval. The EEB, established pursuant to Conn. Gen. Stat. §16-245m, follows the guidance of Conn. Gen. Stat. §16-32f, to advise and assist each LDC in the development and implementation of their conservation planning efforts. Each program contained in the LDCs' joint proposed conservation plan has been accepted, modified or rejected by the EEB before it was submitted to the Authority for approval. In this uncontested proceeding, the Authority must approve, modify or reject the LDCs' joint conservation plan.

C. CONDUCT OF THE PROCEEDING

On September 30, 2011, the Yankee Gas Services Company (Yankee), the Connecticut Natural Gas Corporation (CNG) and The Southern Connecticut Gas Company (Southern; collectively, Companies or LDCs) jointly filed with The Connecticut Light and Power Company and The United Illuminating Company (collectively, Electric Distribution Companies or EDCs), their proposed 2012 Electric and Natural Gas Conservation and Load Management Plan (2012 Plan) with the Authority. Public Act 11-80, <u>An Act Concerning the Establishment of the Department of Energy and Environmental Protection and Planning for Connecticut's Energy Future</u> (Act), amended the process for review of the 2012 Plan such that the Authority retained responsibility to review the LDCs' portion of the 2012 Plan while the Energy and Technology Policy Bureau (EPTB) of the Department of Energy and Environmental Protection was tasked to review the EDCs' portion of the plan. On October 19, 2011, the Connecticut Energy Efficiency Fund filed on behalf of the EEB a letter of support for the 2012 Plan and filed three supplemental documents.

On November 9, 2011, the LDCs and the EDCs filed the "Avoided Energy Supply Costs in New England: 2011 Report" (Avoided Costs Report) dated July 21, 2011, and amended that report on August 11, 2011. The Avoided Costs Report was prepared by Synapse Energy Economics, Inc.

Pursuant to a Notice of Hearing dated November 7, 2011, the Authority held a public hearing in this matter on November 28, 2011 and December 5, 2011, at which time it was closed.

D. PARTICIPANTS IN THE PROCEEDING

The Authority recognized the following as Participants to this proceeding: Connecticut Natural Gas Corporation, P. O. Box 1500, Hartford, Connecticut 06144-1500; The Southern Connecticut Gas Company, 855 Main Street, Bridgeport, Connecticut 06604-4918; Yankee Gas Services Company, c/o Northeast Utilities Service Company, P.O. Box 270, Hartford, CT 06141-0270; The United Illuminating Company, P.O. Box 1564, New Haven, CT 06506-0901; The Connecticut Light and Power Company, 107 Selden Street, Berlin, Connecticut 06037; Environment Northeast, 21 Oak Street, Suite 202, Hartford, CT 06106; the Bureau of Energy and Technology Policy of the Department of Energy and Environmental Protection, 10 Franklin Square, New Britain, CT 06051; and the Office of Consumer Counsel, 10 Franklin Square, New Britain, Connecticut 06051.

II. AUTHORITY ANALYSIS

A. GENERAL OVERVIEW

Pursuant to Conn. Gen. Stat. §16-32f, programs included in the 2012 Plan shall be screened through cost-effectiveness testing that compares the value and payback period of program benefits to program costs to ensure that the programs are designed to obtain gas savings whose value is greater than the costs of the program. Programs in the plan may include, but are not limited to: (A) Conservation and load management programs, including programs that benefit low-income individuals; (B) research, development and commercialization of products or processes that are more energy-efficient than those generally available; (C) development of markets for such products and processes; (D) support for energy use assessment, engineering studies and services related to new construction or major building renovations; (E) the design, manufacture, commercialization and purchase of energy-efficient appliances, air conditioning and heating devices; (F) program planning and evaluation; (G) joint fuel conservation initiatives and programs targeted at saving more than one fuel resource; and (H) public education regarding conservation.

The LDCs stated that they will continue to monitor overall market response and program effectiveness and will maintain the flexibility to reallocate unspent program dollars within program sectors to in-demand programs. This will allow the LDCs the flexibility to react to market conditions, enhance their capability to achieve cost-effective savings and minimize undue interruptions in program offerings in the marketplace. 2012 Plan, Chapter 1, Overview, p. 1.

In conjunction with the EEB and its consultants, the LDCs developed and deployed cost-effective, integrated electric and gas efficiency and conservation programs to all classes of energy consumers throughout the state. Chapters 1-7 of the proposed 2012 Plan reflect goals, strategies and tactics for program design and delivery based on a budget that relies on current funding mechanisms. The 2012 Plan, Chapter 8, titled "Increased Savings Scenario," reflects an expanded goal and commensurate budget scenario that is in keeping with the new state emphasis on energy leadership. Id. In addition, the EDCs and LDCs stated that the programs and initiatives detailed in the 2012 Plan will build on strengths of the past, while also taking advantage of new technologies, relying more heavily on relationships with communities, including the financial community. The EDCs and LDCs acknowledge that the energy efficiency and conservation market is growing with more stakeholders, which include non-participants, participants and vendors. Consequently, the 2012 Plan affects a much wider portion of the population of Connecticut. 2012 Plan, Chapter 1, Overview, p. 7.

Pursuant to Conn. Gen. Stat. §16-32f, the EEB is required to advise and assist the LDCs in the development and implementation of the 2012 Plan. The 2012 Plan included an EEB Program Evaluation Plan, 2012 (Evaluation Plan). The EEB stated that its evaluation consultant determines which programs should be evaluated. Also, it sets priorities and budgets to perform evaluations of specific conservation programs. The EEB works closely with the LDCs to ensure all evaluations are relevant, independent, cost-effective and meet the needs of program administrators and planners. In 2005, the EEB formed an Evaluation Committee to work directly with an EEB Evaluation Consultant in overseeing evaluation planning and completion. The EEB concluded that it is critical that the programs be evaluated, measured and verified in a way that provides assurances to the public that the savings are real and in a way that enables the LDCs to use those savings estimates and other results with full confidence. There is a need to ensure both the reality and perception of the independence and objectivity of Evaluation, Measurement and Verification activities. Exhibit V, Program Evaluation, pp. 3, 20 and 21.

The 2012 Plan includes an itemized proposed budget of $19,127,475 of natural gas energy efficiency program funding that is categorized: Residential, Commercial & Industrial and Other-Administrative & Planning. This represents more than a 13% increase over the approved 2011 budget of $16,870,075. Also, each itemized cost in the proposed budget is further classified by labor, material and supplies, outside services, incentives, marketing and administrative. The proposed budget is attributed to each of the LDCs by the following percentages: Yankee 36.90%, CNG 31.77% and Southern 31.33%. The 2012 Plan of $19,127,475 also includes a proposal for an Increased Savings Scenario or Expanded Budget of $15,076,514 that results in a total budget of $34,203,989. This plan includes natural gas energy efficiency programs categorized as: Residential, Commercial & Industrial and Other-Administrative & Planning. The proposed increased savings are attributed to each of the LDCs by the following percentages: Yankee 38.15%, CNG 31.12% and Southern 30.73%.

The primary funding source for the 2012 Plan is from the LDC customers (on firm rates) through the monthly Conservation Adjustment Mechanism (CAM). Base rates established in rate cases have been set to a zero dollar amount for conservation. LDCs Budget Tables, p. 48. The CAM is an annual rate applied volumetrically to firm customer bills. There are several components that are used to calculate the CAM factor including the 2012 Expanded Budget, interest, lost margin, prior year over / under recovery in CAM spending and the estimated sales for the CAM year. Response to Interrogatory EN-4. Additional revenue funding from the LDCs customers may also be available as a result of excess gross receipts tax collections.[1] 2012 Plan, Chapter 1, Overview, p. 10.

B. PROPOSED 2012 LDCS' CONSERVATION PLAN BUDGETS

In the 2012 Plan, the LDCs expanded funding for existing programs across many sectors. Financing options will continue to be offered for residential and commercial and industrial (C&I) customers for energy efficiency improvements. As a result, the LDCs propose a total budget of $19,127,475 in the 2012 Plan. Continuing in 2012, the LDCs will exclude natural gas projects with incentives in excess of $100,000 from the natural gas C&I budget in the 2012 Plan, and will submit these projects individually to the Authority for review of the incremental funding. A breakdown of the LDCs proposed 2012 Plan natural gas conservation budget is included in the following table.

	PROPOSED 2012 CONSERVATION BASE BUDGETS			
	YANKEE	**CNG**	**SOUTHERN**	**TOTAL**
RESIDENTIAL PROGRAMS				
Home Energy Solutions (HES)	$1,904,000	$1,815,345	$1,824,790	$5,544,135
HES Low Income – Audits	$30,000	$25,772	$25,803	$81,575
HES Low Income – Weatherization	$1,170,000	$1,000,000	$1,100,000	$3,270,000
Residential New Construction	$500,000	$350,000	$300,000	$1,150,000
Water Heating	$70,000	$40,055	$46,210	$156,265
Residential Financing Pilot-Subsidies	$90,000	$90,000	$90,000	$270,000
CHIF Loan Fund	$50,000	$50,000	$50,000	$150,000
Subtotal Residential	$3,814,000	$3,371,172	$3,436,803	$10,621,975
C&I PROGRAMS				
Energy Conscious Blueprint	$1,480,000	$1,240,000	$1,150,000	$3,870,000
Energy Opportunities	$1,020,000	$860,000	$800,000	$2,680,000
O&M (RetroCx, Training)	$200,000	$100,000	$100,000	$400,000
C&I Financing Subsidies	$50,000	$50,000	$50,000	$150,000
Small Business	$100,000	$100,000	$100,000	$300,000
Subtotal C&I	$2,850,000	$2,350,000	$2,200,000	$7,400,000
OTHER				
Administrative & Planning	$394,500	$355,500	$355,500	$1,105,500
Subtotal Other	$394,500	$355,500	$355,500	$1,105,500
TOTAL BUDGET	**$7,058,500**	**$6,076,672**	**$5,992,303**	**$19,127,475**

2012 Plan, Chapter 1. Overview, p. 46, Table A1.

[1] Conn. Gen. Stat. §16-32f(b). The potential amount of excess gross receipts tax (GRT) funding available to support the 2012 Plan is unknown at this time since the annual excess GRT is not calculated until the end of the state's fiscal year, June 30, 2012. In the event funding from excess GRT becomes available, the natural gas companies have developed a procedure with the EEB, per Order No. 4 in the Decision dated January 23, 2008 in Docket 06-10-03, DPUC Review of the Connecticut Gas Utilities Forecast of Demand and Supply 2007-2011 and Joint Conservation Plans, to receive such funds from the State Comptroller's Office. Funds will then be allocated to support energy efficiency programs as described in the 2012 Plan as an offset to the CAM.

The long-term market transformation strategy for the 2012 Plan programs is to achieve fundamental market change in energy management and investment practices for residential, C&I, and institutional markets, resulting in sustainable, continuously improving and highly cost-effective savings. 2012 Plan, Chapter 1, Overview, p. 7. A breakdown of the LDCs proposed 2012 Plan increased savings is included in the following table.

	PROPOSED 2012 CONSERVATION EXPANDED BUDGETS			
	YANKEE	**CNG**	**SOUTHERN**	**TOTAL**
RESIDENTIAL PROGRAMS				
Home Energy Solutions (HES)	$3,101,859	$2,852,249	$3,093,661	$9,047,769
HES Low Income – Audits	$35,000	$25,772	$25,803	$86,575
HES Low Income – Weatherization	$2,181,500	$2,078,744	$2,317,498	$6,577,742
Residential New Construction	$600,000	$350,000	$300,000	$1,250,000
Water Heating	$70,000	$40,055	$46,211	$156,266
Residential Financing Pilot-Subsidies	$135,000	$135,000	$135,000	$405,000
CHIF Loan Fund	$75,000	$75,000	$75,000	$225,000
Subtotal Residential	$6,198,359	$5,556,820	$5,993,173	$17,748,352
C&I PROGRAMS				
Energy Conscious Blueprint	$3,136,612	$2,362,464	$2,080,462	$7,579,538
Energy Opportunities	$2,474,834	$1,735,328	$1,457,286	$5,667,448
O&M (RetroCx, Training)	$324,548	$190,515	$184,050	$699,113
C&I Financing Subsidies	$75,000	$75,000	$75,000	$225,000
Small Business	$246,081	$192,444	$187,763	$626,288
Subtotal C&I	$6,257,075	$4,555,751	$3,984,561	$14,797,387
OTHER				
Administrative & Planning	$591,750	$533,250	$533,250	$1,658,250
Subtotal Other	$591,750	$533,250	$533,250	$1,658,250
TOTAL BUDGET	**$13,047,184**	**$10,645,821**	**$10,510,984**	**$34,203,989**

2012 Plan, Chapter 1. Overview, pp. 48, 50, 52, & 54 Table A1.

The Authority analyzed the increase between the Base Budget of $19,127,475 and the $34,203,989, which includes the Expanded Budget of $15,076,514, and discovered that a larger amount of the Increased Savings Scenario is allocated to the C&I customers as opposed to the residential customers. The Authority's table below shows the percentage of change by each LDC for the C&I and residential customer classes along with the increase to the Administrative budget between the Base Budget and Expanded Budget.

Yankee	Base	Expanded Budget	% Increase
RES	$3,814,000	$ 6,198,359	63%
C&I	$2,850,000	$ 6,257,075	120%
ADM	$ 394,500	$ 591,750	50%
Total	$7,058,500	$13,047,184	85%

CNG	Base	Expanded Budget	% Increase
RES	$3,371,172	$ 5,556,820	65%
C&I	$2,350,000	$ 4,555,751	94%
ADM	$ 355,500	$ 533,250	50%
Total	$6,076,672	$10,645,821	75%

Southern	Base	Expanded Budget	% Increase
RES	$3,436,803	$ 5,993,173	74%
C&I	$2,200,000	$ 3,984,561	81%
ADM	$ 355,500	$ 533,250	50%
Total	$5,992,303	$10,510,984	75%

1. Progress of the 2011 LDCs' Conservation Plan

Yankee, CNG, and Southern anticipate year end expenditures of 136%, 103% and 82%, respectively, of the allowed 2011 budget and anticipate year end savings of 195%, 80% and 6%, respectively, of each LDC's goals for the Residential New Construction (RNC) program. 2012 Plan, Chapter 2. Residential Programs, pp. 103-105. The anticipated savings cited above are from the LDCs' exhibits in the 2012 Plan. For example, Southern's anticipated year end savings of 6% is derived from its Goals, both Annual and Life time savings at the bottom of the page. 2012 Plan, p. 105. The average size of a home in CNG's territory is larger when compared to those either in the Yankee or Southern service areas. The savings in 2011 is lower due to low-income homes, which tend to be smaller in size. In 2011, 80% of all homes in CNG's territory were low income Energy Star homes, which receive higher incentives than non-Energy Star homes. Average savings per home were less than originally filed due to a high percentage of homes being completed in 2011 that are income eligible units. These units are smaller in size resulting in limited savings. Since the 2011 program consists of a high percentage of income eligible projects, higher incentives are received. Limited income projects receive a 50% increase versus non-income eligible projects. Response to Interrogatory ENG-33. For 2011, actual marketing expenses reflect the downturn in the residential new construction market. Response to Interrogatory ENG-40.

For the Home Energy Solutions (HES) Program, Yankee, CNG, and Southern anticipate year end expenditures of 111%, 145%, and 112%, respectively, of the allowed 2011 budget and anticipate year end savings of 106%, 101% and 104%, respectively, of each LDC's 2011 goals. For the 2012 HES program, Yankee, CNG and Southern anticipate year end expenditures of 193%, 143% and 197%, respectively, of the allowed 2011 budget and anticipate year end savings of 227%, 392% and 118%, respectively, of each of the LDCs 2011 goals. 2012 Plan, Chapter 2. Residential Programs, pp. 130-132, 139-141.

For the Home Energy Solutions Income Eligible (HES-IE) Program, Yankee, CNG and Southern anticipate year end expenditures of 89%, 97% and 78%, respectively, of the allowed 2011 budget and anticipate year end savings of 70%, 81% and 57%, respectively, of each of the LDCs' goals for the Residential Water Heating Program. 2012 Plan, Chapter 2. Residential Programs, pp. 146-148.

The LDCs anticipate year-end expenditures at or just below 100% of the approved 2011 budget for the Energy Conscious Blueprint (ECB) program and anticipate year end savings of 66%, 123% and 10% of Yankee, CNG and Southern respectively, 2011 goals. 2012 Plan, Chapter 3. C&I Programs, pp. 171-173. For the Energy Opportunities (EO) portion of its C&I program, Yankee, CNG and Southern anticipate year end expenditures of 137%, 100% and 180%, respectively, of the allowed 2011 budget and anticipate year end savings of 39%, 50% and 9%, respectively, of each of the LDC's goals. 2012 Plan, Chapter 3. C&I Programs, pp. 185-187. For the Operations and Maintenance program, currently referred to as the Business and Energy Sustainability Program, Yankee, CNG, and Southern anticipate year end expenditures of 74%, 128% and 124%, respectively, of the allowed 2011 budget and anticipate year end savings of 70%, 230% and 38%, respectively. 2012 Plan, Chapter 3. C&I Programs, pp. 220-222. CNG and Southern stated that the projected year end savings included in the 2012 Conservation and Load Management Plan were based on mid-year savings estimates, which were anticipated to be achieved by the end of the year. The LDCs indicated their calculations show that the Increased Savings Scenario or Expanded Budget would provide for greater percent increases in savings. Written Exceptions, p. 2.

The Authority examined the data related to the progress of the 2011 Plan and discovered the following for each program cited above. First the percentage increase in expenditures for the HES program exceeds the percentage increase of energy savings for that program. This shows that the three LDCs are spending greater dollars on a percentage basis to save lower amounts of energy. Regarding the HES-IE program, the three LDCs did not expect to completely spend their allotted budget for this program. Similar to the HES program, the percentage increase in the expenditures exceeds the percentage increase in energy saved for each of the LDCs. Regarding the Energy Conscious Blueprint program, while the three LDCs' anticipate spending greater than 100% of their respective budgets each will achieve a significantly lower percentage of energy savings. Regarding the Operations and Maintenance program, Yankee did not spend its entire budget for this program, while CNG and Southern exceeded their respective budgets by more than 100%. Although, CNG appears to have achieved a energy savings that is 230% greater than its goal, Southern and Yankee did not achieve their respective goals for energy savings.

The Authority finds that the percentage of increased savings in most of the above cited programs is less than the percentage increased to each of the LDC's respective budgets. As a result, it is clear that spending greater dollars on a given program does not produce a one-to-one or greater ratio of spending to energy savings. This raises questions regarding these conservation programs and their true ability to save energy at a cost effective price. The Authority finds that this issue needs to be analyzed further. Therefore, specifically regarding the HES and HES-IE programs, the Companies will be directed to submit the following:

1. actual number of homes completed versus the goals;
2. size in square footage and type of homes such as multifamily, condos or single family homes that participated in each program;
3. incentives paid per home;

4. identify the respective measures on an individual basis that were installed for each home, which corresponds to the incentives provided to the owner;
5. provide a statistical sample of 100 homes that participated in each of the programs, including the date the measure(s) were installed, an analysis that shows the normalized and annualized sales for the 12 months before and after the measures were installed based on actual meter readings;
6. regarding the total number of customers participating in the above cited programs, provide the number of customers that have delinquent bills with out-standing balances of 30, 60, 90 and greater than 120 days past due;
7. regarding No. 6 above, indicate the total number of customers associated with these programs as of December 31, 2011, that the LDCs would include as Bad Debt; and
8. regarding Nos. 6 and 7 above, indicate the total dollars spent on conservation measures related to customers that correspond to the delinquencies cited in No. 6 and the customers that have or are anticipated to be included in the Bad Debt account as of December 31, 2011.

2. Program Goals

The RNC program's objective is to reduce the energy use and peak demand in new housing through improving the energy efficiency of newly constructed homes via four energy efficiency tracks offered to program participants. 2012 Plan, Chapter 2. Residential Programs, pp. 89-91. The goal of this program will be to encourage participation, offer builders/developers an innovative marketing resource to help sell their Energy Star homes and for the homebuyer to have more direct participation. 2012 Plan, Chapter 2. Residential Programs, p. 95. The LDCs are supporting the Environmental Protection Agency's Energy Star homes 3.0 program, which promotes new home construction that is 15-20% more efficient than the 2009 International Energy Conservation Code. Response to Interrogatory EN-1.

The HES program's objective is to reduce total residential energy use through comprehensive treatment of all single-family and multi-family residential dwellings. HES will be used to fulfill the Act's goal of weatherizing 80% of existing homes by 2030. 2012 Plan, Chapter 2. Residential Programs, p. 107. In 2012, there will be a continued focus on ensuring that the delivery of services for the program becomes more similar. In addition, the goal will be to move vendors from focusing on the core services to a home performance model of achieving a set percentage of savings per home. Also, a focus on early retirement of inefficient water heating and home heating systems has been incorporated into the program. On-bill repayment to finance energy efficiency upgrades will continue with low interest rates and a ten-year loan term. Response to Interrogatory EN-1.

The HES-IE program's objective is to provide comprehensive weatherization, energy conservation and education services to limited-income customers to reduce their energy burden; to make utility bills more affordable and homes more energy-efficient and comfortable; and to provide energy efficiency education to raise customer awareness of conservation and to encourage customers to take steps beyond weatherization. 2012 Plan, Chapter 2. Residential Programs, p. 109. In 2012, there will be a continued focus on ensuring that the delivery of services for the program becomes more similar. For example, diagnostic duct sealing in this program is not a skill set for many of the vendors. This will be a focus for 2012. Response to Interrogatory EN-1.

The Residential Water Heating Program's objective is to encourage customers to purchase and install high-efficiency natural gas water heaters including indirect water heaters, on-demand tankless water heaters, combined boiler and on-demand water heating units. 2012 Plan, Chapter 2. Residential Programs, p. 143.

The Energy Conscious Blueprint (ECB) program maximizes energy savings for "lost opportunity" projects by: introducing energy efficiency concepts to customers, architects, engineering firms, contractors, commercial realtors, etc.; demonstrating the benefits of selecting efficient options during the design stage; and working with the design community to convince customers that more benefits are achievable by designing for the whole-building operations and operating conditions. In 2012, the goal will be to continue to provide energy efficiency measures to customers using an integrated program delivery. 2012 Plan, Chapter 3. C&I Programs, p. 161.

The EO program encourages customers and their contractors or Energy Service Companies (ESCOs) to save energy in existing commercial, industrial and municipal facilities by offering incentives, financing and other resources to replace existing, inefficient equipment with energy saving options. In 2012, this program will continue to make use of successful retrofit strategies for meeting the needs of the LDCs diverse customer base, including a more comprehensive approach to improving the overall performance of facilities. 2012 Plan, Chapter 3. C&I Programs, pp. 175 and 177.

The Business and Energy Sustainability Program's objective is to capture the potential energy savings from a combination of information-based behavioral changes and capital investments by the customer. In 2012, the LDCs will continue to work on developing, refining and implementing each of the program tools by investing additional fund dollars into the programs, broadening the use of benchmarking and dashboards; broadening the base of technologies eligible for incentives; developing a smaller Retro-Commissioning (RCx) offering for smaller sized customers, and broadening the training and types of courses that are offered. 2012 Plan, Chapter 3. C&I Programs, pp. 203 and 209.

C. RESIDENTIAL PROGRAMS

The purpose of the residential conservation programs is to provide cost-effective in-home services and retail product incentives that allow homeowners to save energy and money without sacrificing comfort or convenience. The LDCs stated that the residential conservation programs continue to evolve by adding additional measures to the respective programs, which exploit emerging technologies for heating sources and other appliances. Within the 2012 Plan, the key themes of the residential conservation programs include:

- Deep and meaningful savings goals (20% to 25%) that will have a real impact on individual residential energy bills and carbon footprints, and an aggregate energy-systems benefit that will contribute to the state's overall energy goals.

- Increased residential awareness of the value and benefits of weatherization.
- Increased incremental energy savings through high performance and Energy Star homes HVAC system upgrades, and measures identified through advanced diagnostics.
- Supporting customers in making energy management an integral part of their home practices and lifestyles through the use of behavioral change tools and techniques including outreach, education and social networking.
- Innovative financing.

2012 Conservation Plan, Chapter 2. Residential Programs, p. 63.

The Authority reviewed the LDCs' residential programs and finds that the Residential Water Heating Program and CHIF Loan Fund are acceptable as presented. The Authority has the following comments regarding the remaining residential programs.

1. Home Energy Solutions

The LDCs proposed budget expenses of $5,544,135 for Home Energy Solutions (HES), $81,575 for the HES Low Income – Audits and $3,270,000 for the HES Low Income – Weatherization Program for inclusion in their 2012 Plan. In addition, the LDCs proposed potential increased savings of $9,047,769 for the Home Energy Solutions, $86,575 for the HES Low Income – Audits and $6,577,742 for the HES Low Income – Weatherization Program. LDC Budget Tables, pp. 46-48, Chapter 8 Increased Savings Scenario Tables, pp. 373, 375, 377 and 379.

HES is the residential portfolio flagship program included in the 2012 Plan. HES began in 2006 as a residential duct sealing pilot program and has grown into a multi-million dollar retrofit program with 26 vendors with 200 employees delivering "Core Services" to customers throughout Connecticut. In 2011, the Companies' income eligible programs "LDCs and ECCs Helps and WRAP" were merged under the existing HES umbrella of programs. The intention of merging these programs was to market a single program to all eligible customers. The LDCs stated that the merging of these programs provides more consistency in the application of weatherization practices, vendor training and creates a seamless brand identity for residential customers. 2012 Plan, Chapter 2. Residential Programs, p. 63. The objective of the HES program is to reduce total residential energy use through the comprehensive conservation treatment of all single-family and multi-family residential dwellings. The Companies intend to use HES as the primary vehicle to fulfill the Act's goal of weatherizing 80% of existing homes by 2030. 2012 Plan, Chapter 2. Residential Programs, p. 107.

The LDCs testified that their current residential HES programs are designed to serve approximately 12,000 customers a year. The 2012 Plan includes funding of $8.9 million, which is allocated to the three LDCs for HES and HES-IE programs. This includes $6.7 million of incentives for natural gas customers related to weatherization efforts. The LDCs believe that the current budget is sufficient to meet the weatherization goals of the Act. Response to Interrogatory EN-49. The LDCs testified that they have about 500,000 residential customers in Connecticut. With approximately

400,000 remaining to weatherize their homes. Further, their current programs are expected to have about 228,000 participants by the Act's 2030 deadline. The LDCs are unsure as to the total number of customers that have received service under these programs to date. There is a potential that the LDCs may need to raise the number of customers to be served by as much as 150,000 over and above the current budget targets. However, the LDCs recommend a market assessment study to confirm the total number of customers that would need to be served to meet the Act's weatherization goals. The LDCs and the EEB are struggling with the intent and the definition of weatherization that is expected under the Act. Tr. 11/28/11, pp. 115-120.

The LDCs created several tables to show the customer impact within each of their service territories. These customers include residential and C&I services, (Small General, General, Large General) and the top 10 customers for each LDC. The following tables show the effect of the weatherization requirements that the Act has on different customer classes based on the LDCs' assumption that the Base Budget is sufficient to meet the requirement by 2030.

Impact of PA 11-80 Weatherization Requirements on Yankee's Customers with Base Budget

Customer Type	Annual Consumption ccf	2012 CAM Payment	19 Year CAM Payment
Residential Rate 2 750 ccf/Year	750	$6	$114
Small General Service Maximum Usage	5,000	$40	$757
General Service Mininum Usage	5,001	$40	$757
Large General Service Minimum Usage	20,001	$159	$3,029

Impact of PA 11-80 Weatherization Requirements on Yankee's Top 10 Customers with Base Budget

Top Ten Customers	Annual Mcf	2012 CAM Payment	19 Year CAM Payment
Customer 1	1,291,815	$104,079	$1,977,505
Customer 2	603,790	$48,646	$924,277
Customer 3	553,965	$42,400	$805,603
Customer 4	461,637	$35,334	$671,340
Customer 5	308,130	$24,825	$471,683
Customer 6	262,523	$20,093	$381,772
Customer 7	238,578	$18,261	$346,952
Customer 8	215,240	$17,341	$329,485
Customer 9	205,000	$15,691	$298,124
Customer 10	204,360	$15,642	$297,189

Impact of PA 11-80 Weatherization Requirements on CNG's Customers with Base Budget

Customer Type	Annual Consumption ccf	2012 CAM Payment	19 Year CAM Payment
Residential - Heating Rate	750	$7	$139
Small General Service (at Maximum)	4,999	$49	$940
General Service (at Minimum)	5,000	$49	$940
Large General Service (at Minimum)	30,001	$296	$5,640

Impact of PA 11-80 Weatherization Requirements on CNG's Top 10 Customers with Base Budget

Top Ten Customers	Annual Consumption Mcf	2012 CAM Payment	19 Year CAM Payment
Customer #1	6,771,300	$67,000	$1,273,000
Customer #2	3,166,190	$31,329	$595,251
Customer #3	2,321,060	$22,966	$436,354
Customer #4	1,890,710	$18,708	$355,452
Customer #5	1,781,070	$17,623	$334,837
Customer #6	1,747,750	$17,293	$328,567
Customer #7	1,696,940	$16,791	$319,029
Customer #8	1,172,020	$11,597	$220,343
Customer #9	1,149,540	$11,374	$216,106
Customer #10	1,071,170	$10,599	$201,381

Impact of PA 11-80 Weatherization Requirements on Southern's Customers with Base Budget

Customer Type	Annual Consumption ccf	2012 CAM Payment	19 Year CAM Payment
Residential – Heating Rate	750	$9	$163
Small General Service (at Maximum)	4,999	$58	$1,100
General Service (at Minimum)	5,000	$58	$1,100
Large General Service (at Minimum)	30,000	$347	$6,600

Impact of PA 11-80 Weatherization Requirements on Southern's Top 10 Customers with Base Budget

Top Ten Customers	Annual Consumption Mcf	2012 CAM Payment	19 Year CAM Payment
Customer #1	2,577,990	$29,850	$567,150
Customer #2	2,095,410	$24,263	$460,997
Customer #3	1,640,370	$18,994	$360,886
Customer #4	1,404,730	$16,265	$309,035
Customer #5	1,270,640	$14,713	$279,547
Customer #6	1,251,045	$14,486	$275,234
Customer #7	1,181,500	$13,681	$259,939
Customer #8	1,089,230	$12,612	$239,628
Customer #9	1,064,470	$12,326	$234,194
Customer #10	1,011,860	$11,716	$222,604

The largest component of HES is the "Core Services" or "In-Home Services" programs. The objective of Core Services is to identify comprehensive cost effective energy conservation opportunities in single family homes and educate the homeowner regarding the opportunities under the program. Under the HES program, a diagnostic testing and evaluation of homes is performed. In addition to testing and evaluation services provided under the program, cost–effective measures including blower door guided air sealing, duct sealing, installation of hot water measures and pipe insulation are installed as part of the Core Services. 2012 Plan, Chapter 2. Residential Programs, p. 110.

It is the LDCs' intent to make the HES program a market-based program. The HES program generates customer leads and potential sales for HVAC dealers, insulation installers and home improvement contractors. In coordination with the EEB and the PURA, the Companies have made a number of recent enhancements to improve the delivery and quality of HES services:

- Established a standard co-payment for all electric and natural gas customers allowing the program to maintain steady customer participation.
- Created and enhanced the standardized HES Summary Assessment Report that each program participant receives.
- In 2011, HES gained recognition from the US EPA establishing Connecticut as a Home Performance with Energy Star state. Home Performance with Energy Star allows contractors to provide HES core services and then create a scope of work for additional measures that will be eligible for incentives and financing.
- Established a low interest financing program with on-bill re-payment.
- Enhanced vendor quality control and assurance protocols.
- Enhanced technician certification and trainings.

2012 Plan, Chapter 2. Residential Programs, pp. 64 and 65.

Under the HES program, administrators are working to develop enhancements including the establishment of a licensing requirement for Home Energy Assessment professionals by 2012. The LDCs are currently working with the legislature to establish the licensing criteria for this professional certification. The program enhancements are related to the review and evaluation of new field monitoring tools that demonstrate to the customer the value and benefits of additional energy efficiency measures. The LDCs also intend to improve the kitchen table wrap-up session by replacing the toolbox kit with a print on demand kit (POD) and implementing the Home Energy Yardstick Tool (HEY). By furnishing the POD to the vendors, it allows them to provide a more meaningful and effective conversation with the customer about the services that can be provided under the HES program. The POD should improve the program goals of selling and tracking the measures offered to a customer. 2012 Plan, Chapter 2. Residential Programs, pp. 64 and 65.

The LDCs also indicated that implementing the full version of the HEY tool, should encourage customers to look at the potential for deeper savings relating to opportunity measures, which benefit the customer's overall home efficiency and utility consumption and carbon footprint. The program continues to improve and enhance the existing data tools that would allow tracking of program and vendor performance by focusing on key metrics. Further, the LDCs want to ensure that both third party vendors and Community Action Agencies will follow the same technical and quality assurance protocols as their HES colleagues. 2012 Plan, Chapter 2. Residential Programs, p. 65.

Moreover, the LDCs are continuing to examine ways to transform the HES market in a gradual manor to assure proper training and delivery of services along with assuring customer satisfaction and energy savings. The LDCs stated that it will take many steps to achieve the final goal of the program. One of the core focuses and challenges for the 2012 budget year is to squeeze additional natural gas savings from the Core Services and add on measures associated with the HES program. The Companies have developed a goal of between 10% and 25% additional savings from the HES program. This can be accomplished by adding deeper measure penetration in homes by vendors. The Companies and the vendors also will need to better prescreen customers for potential savings and educate participants that the HES Core Services are just the beginning and that additional "add-on" measures are available under the program. 2012 Plan, Chapter 2. Residential Programs, p. 65.

The OCC recommended that no incentive be offered for the replacement of a furnace or boiler that is within its useful life unless the equipment is tested for efficiency by a qualified HVAC vendor, the replacement is found to be cost-effective as a result of that testing, and the program participant is given a detailed analysis of the benefits and the payback period. This requirement should not be applied to furnaces and boilers already beyond their useful life, or those that need replacement due to malfunction. The OCC recommended that the HVAC equipment will not be incented for early replacement unless the participant first meets standards with respect to insulation. In addition, the Companies should be allowed to provide incentives to vendors, which should be developed in coordination with the EEB's technical consultants. OCC Brief, pp. 2 and 3. ENE stated that the EEB should consider designing incentives for the HES vendors to align more appropriately available financial resources with the Companies' programmatic comprehensiveness goals. ENE Brief, p. 3.

The EPTB stated that the HES program has been extremely successful but has a low cost to benefit ratio compared to other conservation programs offered by the LDCs. Therefore, reducing program administrative costs and enabling more comprehensive measures must occur to improve cost effectiveness. Also, there have been efforts to introduce "deeper and broader" measures into the HES conservation program. However, few customers have implemented these conservation measures and the HES program administrators and stakeholders must find ways to implement more of these measures to meet the goal of weatherizing 80% of the homes in Connecticut by 2030. The continued implementation of gas conservation measures is important because of the fragile economy in Connecticut and conservation programs reduce energy costs for consumers and businesses. EPTB Brief, pp. 1-3.

The Authority agrees with the OCC regarding its recommendation that no incentive be offered for the replacement of a furnace or boiler that is within its useful life unless the equipment is tested for efficiency by a qualified HVAC vendor. However, the Authority disagrees with the OCC's recommendation that the HVAC equipment not be incented for early replacement unless the participant first meets standards with respect to insulation. The level of insulation in a customer's home is a separate and distinct issue that should not be combined with HVAC replacements.

The Authority finds that the current budget of $8.9 million is expected to serve 12,000 residential customers a year, of which $6.7 million will be used for direct customer incentives. Using the LDCs' assumptions that the current budget levels serve 12,000 customers, then over the next 11 years, assuming no changes to the programs or spending levels, they expect to weatherize up to 228,000 homes (12,000 home/year * 19 years). Based on this calculation, 180,000 homes (400,000 unserved customers – 228,000), would continue to remain unserved based on the current gas budget. However, this assumes that all the homes in the LDCs' service territory need to be weatherized. The weatherization programs have been in place for almost 20 years; therefore, a significant number of homes should have been weatherized during that period. However, the total number of homes that have been weatherized to date is unknown. The LDCs will be directed to provide the total number of residential customers in each of their service territories and the number of homes that received weatherization services since the inception of the conservation programs.

The Authority assumes that the LDCs' total number of homes that need to be weatherized on a high case scenario would be in between 150,000 to 180,000 homes not currently included in the budget. The cost to weatherize 180,000 customers over the 19-year period with 9,474 homes per year (180,000 customers / 19 years) would need to be added each year to the LDCs conservation programs funding. Using the LDCs' current gas budget as a reference, the worst case scenario would be that the budgets in the future would need to increase as much as $7,025,808 ($8,900,000 / 12,000 customers * 9,474 customers annually). This results in an annual conservation budget of $26,153,283 ($19,127,475 + $7,025,808).

The LDCs proposed a study to determine the actual number of customers that potentially remain to be weatherized in Connecticut. However, the LDCs did not provide any relevant information regarding the potential cost of such a study. The Authority will determine at a later time whether an independent study to determine how many homes need to be served under the HES programs is necessary. The Authority recommends that the LDCs review their historical records and determine how many customers have been served to date. The 2012 Plan indicated that the HES program served 34,296 homes and the HES-IE program served 15,347 homes during 2010. 2012 Plan, Chapter 1. Overview, p. 17, footnote No. 5. It is unclear as to whether these homes were all fueled by natural gas or some combination of fuels that was not identified in the annual number of homes served. The Authority realizes that producing a budget and providing conservation programs does not mean that customers ultimately will participate in a conservation program.

2. Residential New Construction Program

The LDCs proposed for inclusion in the 2012 Plan, budget expenses of $1,150,000 for the Residential New Construction (RNC) Program with a potential increased savings of $1,250,000. The RNC program was originally created in the Decision dated February 25, 2009 in Docket No. 08-10-02, DPUC Review of the Connecticut Gas Utilities Forecasts of Demand and Supply 2009-2013 and Joint Conservation Plans (2009 Conservation Decision). That Decision required that conservation incentives could only be applied to residential customers that were located on an existing distribution main. 2009 Conservation Decision, p.12. The directives of the 2009 Conservation Decision were reaffirmed in the Decision dated March 17, 2010 in Docket No. 08-10-02, DPUC Review of the Connecticut Gas Utilities Forecast of Demand and Supply 2009 – 2013 and Joint Conservation Plan (2010 Conservation Decision), p. 29.

a. Description of the Proposed 2012 Program

The RNC will phase in the new Energy Star version 3.0 requirements during 2012. The Companies began the transition from the current Energy Star standard in 2011 by adding Energy Star 2.5 requirements to the respective programs. The new Energy Star 3.0 requirements include additional thermal enclosure system requirements, thermal bridging criteria and water management systems. The "CT Zero Energy Challenge" (CT ZEC) will continue in 2012 as a subprogram called Low Load Homes. 2012 Plan, Chapter 2. Residential Programs, p. 68.

Under the RNC, the Companies intend to work with local building officials to help prepare the market for the expected transition to the 2009 International Energy Efficiency Code (2009 IECC), which is expected to be adopted in mid-2012. The Companies intend to comply with the 2009 IECC code requirements as part of the 2012 Plan. The residential building sector will be significantly impacted by the more stringent air and duct leakage requirements. These requirements include performance testing for duct leakage in many homes as a result of the 2009 IECC. 2012 Plan, Chapter 2. Residential Programs, pp. 68 and 89.

The Companies indicated that as Connecticut adopts a more comprehensive building code, it is critical to influence builders and home owners to take the next step to meet Energy Star standards. 2012 Plan, Chapter 2. Residential Programs, p. 89. They intend to target new home buyers, builders, developers and other market participants such as architects building code officials, home energy rates, insulation contractors, real-estate agents and appraisers, and HVAC contractors. The LDCs stated that builders and industrial associations will drive participation in the RNC program. The Companies' marketing strategy is based on getting the builders and industrial associations timely and relevant information regarding current technology, building trends, and program details and benefits. The Companies include the following practices in communicating with builders and industrial associations:

- program seminars;
- advertising in local and regional trade publications;
- submission of articles to local and regional trade and consumer publications;
- participate in home shows;
- participate in association events including sponsorships;
- outreach to legislative audiences through newsletters, forums one-on-one meetings and public events;
- promotion of the RNC program through media; and
- any public relation marketing opportunities that the CT ZEC generates.

2012 Plan, Chapter 2. Residential Programs, p. 94.

b. LDCs' Interpretation of RNC Customer Mains Rules

A customer can only participate in the RNC program if that customer is on an existing main. CNG and Southern testified that they consider a customer to be "on main," if that main passes in front of the customer's home. Further, any pipe placed into the street that is not a service line and is used to move gas to multiple homes is considered a distribution main. As a result, that customer is not eligible for funding from the RNC conservation programs. Tr. 11/28/11, pp. 95-102. However, in their brief, CNG and Southern requested that the Authority revise the existing criteria for customer eligibility for RNC incentives. Specifically, that all new home construction be eligible for incentives under the RNC program to encourage all new housing stock in Connecticut to be built as energy efficiently as possible. CNG/Southern Brief, p. 2.

Yankee testified that it considers a customer to be "on main" if the company can install a (T) connection into existing main in a street, then it installs a distribution main through a development of homes. Yankee's interpretation of an "on main" customer allows a customer(s) that is not currently on existing mains to receive conservation funding under the RNC program. Id; Yankee Brief, p. 2.

Yankee provided an exhibit that shows that during 2010, 24 homes were built under the RNC program. Yankee testified that the average size of the homes receiving conservation funding under the RNC program during 2010 was 3,151 square feet. During 2011, 18 homes were completed under the RNC program. Yankee indicated that on a combined basis for 2010 and 2011, 42 homes were completed with a total average size of 2,134 square feet. These 42 homes represent 11% of the homes completed during 2010 and 2011 in Yankee's service territory. The 42 homes are from 5 different subdivisions representing 3 developers. Yankee testified that "none of these projects involved the extension of an existing main." However, these projects resulted in a median length of 74 feet of distribution main per home. Yankee expects 32 additional homes to be built in the three housing developments but as of November 28, 2011, none were completed. Late Filed Exhibit No. 5.

Yankee, EEB and ENE appear to agree that the RNC program should be available to all customers and requested that the Authority change the Draft Decision's ruling that stated only customer's on existing mains are eligible for the RNC program. None of the above cited Participants indicated whether any limits should be placed on the amount or lengths of main expansion necessary to connect new residential customers under the RNC program. Each based their recommendation on the statements that building less efficient homes would increase the cost to ratepayers. Further, there are cost effective efficiencies to building new housing developments served by natural gas. Yankee Written Exceptions, p. 2; ENE Written Exceptions, p. 2; EEB Written Exceptions, p. 2. More specifically, ENE recommended allowing all residential customers to participate in the RNC program by stating that this ". . . is further consistent with the goals established by the General Assembly in Section 1 of P.A. 11-80, Section 51(e)." ENE Written Exceptions, p. 2. The EEB indicated that any new residential customer would be paying to support conservation efforts through the CAM and, therefore, should be eligible to receive the benefits of conservation programs. EEB Written Exceptions, p. 2.

The Authority's 2009 and 2010 Conservation Decisions clearly held that: only customers along an existing main are eligible for funding under the RNC program. However, as a result of the changes to the state's goals for conservation under the Act, the new policy is to expand conservation measures to reduce unnecessary and wasteful consumption. Therefore, the Authority will allow all customers in each LDC's service territory to participate in the RNC program.

To ensure that conservation funds are being used appropriately, the Authority will direct each LDC to provide a detailed summary in a working Excel spreadsheet in their subsequent conservation filings. The report will include all of the projects completed under the RNC program for: (1) the prior year's 12-month period; plus (2) data from January 1 to a date certain of the proposed budget year. These summaries will individually show each home served, date(s) and list of measures installed per home, size of each home, total incentives provided per home, incentives paid corresponding to each measure, whether each measure was inspected by LDC staff, capital cost and lengths of distribution main installed to serve each customer. Indicate how the Hurdle Rate for each home or project was affected by the addition of the conservation measures, show the anticipated consumption and peak day demand before and after conservation measures were installed. If a customer is part of a housing development, the LDC will show the cost and length of mains: (1) extended to meet the distribution pipe connection for the housing development; and (2) necessary to serve the homes in that development. Further, regarding any residential housing development participating in the RNC program, the LDCs will provide the signed contract between the builder and the LDC.

3. Residential Financing Pilot Program - Subsidies

The LDCs proposed for inclusion in the 2012 Plan, expenses of $270,000 for the Residential Financing Pilot Program - Subsidies. The LDCs also estimated potential increased savings of $405,000 for this line item. The Companies developed a residential financing program from June 1, 2010 to May 31, 2011, that offered loans at below-market interest rates. The Residential Financing Pilot Program funded a total of 1,250 loans to customers for a total of $14.5 million in capital investment for conservation measures and home improvements. The Companies indicated that the pilot program was successful; however, the cost for interest rate buy-downs was high due to the capital source used by the third party financing vendor, Fannie Mae at 14.99%. The Companies, in conjunction with the EEB, sought alternative financing models to reduce the cost to the Fund. On January 1, 2011, the Companies introduced a new residential loan program by offering subsidized low interest rate loans with an on-bill repayment to HES residential customers. The new loan program used shareholder capitol and $6 million of unspent 2010 energy efficiency funds. 2012 Plan, Chapter 2. Residential Programs, p. 68.

The Authority finds that reducing the interest rate associated with the program would benefit customers. Therefore, the Authority continues to approve the Residential Financing Program for the 2012 budget year.

D. COMMERCIAL AND INDUSTRIAL PROGRAMS

The natural gas C&I programs have increased since their introduction 2008, to the current budget of $7.25 million for the three LDCs. The current budget includes a 10.5% increase over and above the proposed 2011 C&I budget. Reflecting the increases in the conservation budget, the Companies are continually expanding the scope of gas measures to facilitate increased customer participation. As an example of these new measures, the Companies have added rebates for high efficiency gas fired heat pumps and low and high intensity infrared heating.

The EEB C&I Committee that includes business, utility and agency representatives continues to conduct strategic examination of the C&I programs under the overarching principles defined in the C&I Vision Statement. The overall vision for the future evolution of the Energy Efficiency Fund's C&I programs is to create a cost effective support structure. The goal is to entice a sustainable and competitive business climate for Connecticut's businesses, state facilities, municipal facilities and industries based on bottom-line solutions for economic competitiveness, environmental stewardship and social responsibility. The key themes of the C&I programs are to:

- promote bold and meaningful savings goals that range between 30% and 50% through energy efficiency, load management and on-site generation that will help all C&I customers have a real impact on their energy bills, contribute to their productivity, and enhance their competitiveness;
- achieve large increments of energy efficiency through high performance buildings, systems and industrial processes;

- provide comprehensive business energy solutions that integrate energy efficiency, load management and other related initiatives into a cost effective, comprehensive solution for businesses; and
- support businesses in making energy management an integral part of business practices and corporate structure.

2012 Plan, Chapter 3. C&I Programs, p. 149.

The Companies stated that to be able to meet the challenges associated with these programs, the C&I portfolio continues to undergo transformations through time. Since the 2010 Conservation Plan, the retrofit program incentive designs have successfully encouraged many customers to implement energy efficiency projects using a comprehensive approach to obtain deeper reaching savings through conservation. The Companies intend to continue these programs in the 2012 Plan. To achieve the future goals, the Companies have, and continue to research new training opportunities for customers and trade allies regarding a wide variety of subjects, including code training for architects and engineers in association with the Connecticut Chapter of the American Institute of Architects (AIA), the American Council of Engineering Companies (ACEC) of Connecticut, (ASHRAE) and the Connecticut Society of Professional Engineers (CSPE). 2012 Plan, Chapter 3. C&I Programs, p. 150.

The Companies indicated that with the advances in technology, the C&I programs will begin to focus on efforts to educate customers about real-time feedback using "Energy Dashboards" on building operations including the operations of failure analysis that is beginning to develop as an industry. 2012 Plan, Chapter 3. C&I Programs, p. 150.

C&I Financing Subsidies and Small Business programs are acceptable as presented. The Authority has the following comments regarding the remaining C&I programs.

1. Energy Conscious Blueprint

The LDCs proposed for inclusion in its 2012 Budget, expenses of $3,870,000 for the Energy Conscious Blueprint (ECB) Program. In addition, the LDCs proposed potential increased savings of $7,579,538 for this line item. The ECB program serves the new construction and equipment replacement markets. The energy efficiency program administrators around the country classify programs like the ECB as "lost opportunity" programs. The lost opportunity implies that without active involvement by program administrators providing rebates, customers, contractors, and design professionals would design new buildings and install energy savings devices that meet the existing requirements. Since the current economic downturn is still affecting new construction, the program continues to promote the replacement of old equipment with new higher efficiency replacements and renovations. 2012 Plan, Chapter 3. C&I Programs, p. 156.

The LDCs stated that major building renovations and other code regulated events will likely dominate the ECB program activity for the next few years. 2012 Plan, Chapter 3. C&I Programs, pp. 155 and 156. The Companies admitted that the building code is becoming more stringent as time passes. Therefore, the ECB program is being enhanced to assist the marketplace in making the transition to the new code requirements. As a result the ECB program will offer two tracks for new construction activities during 2012: (1) traditional measure-based programs that offer prescriptive and custom based installation incentives; and (2) the whole building performance portion of the program recognizes the variability in setting code baselines when working to the requirements of design processes for high performance building. The Companies stated that under the whole building approach, they will provide incentives to the customers to help them model their projects using hourly simulation programs. When the whole building design approach is linked with sustainable energy management, the programs work to ensure buildings achieve the levels of efficiency they were designed to meet. Id.

2. Energy Opportunities Program

The LDCs proposed for inclusion in the 2012 Budget, expenses of $2,680,000 for the EO program. The LDCs also estimated potential increased savings of $5,667,448 for this line item. The EO program encourages C&I customers and their respective contractors or ESCOs to save energy in existing commercial, industrial and municipal facilities. This would be accomplished by offering incentives, financing and other resources to replace existing, inefficient equipment with energy saving options. The EO program targets customers with an average electric peak day demand of 200 kw or more that could benefit from both electric and gas retrofit projects in their facilities. Natural gas customers are required to be on a firm rate to receive gas measure incentives. Additionally, owners and managers of multi-family residential buildings may also participate in the EO program. 2012 Plan, Chapter 3. C&I Programs, p. 175.

The EO program relies on marketing and direct interaction with contractors, engineers, ESCOs as well as repeat customers and word of mouth advertizing. The LDCs may augment enrollment with:

- paid advertising through radio, print and electronic media along with local and regional business publications targeting building owners, business owners, facility managers and energy managers;
- paid advertising in print and electronic local and regional contractor trade journals targeting contractors;
- targeted mailings and e-mail communication; and booth presence at strategically selected trade shows

2012 Plan, Chapter 3. C&I Programs, p. 176

In addition to program specific promotions, marketing efforts also will include actions intended to support C&I customers and their contractor community and to further transform the conservation market-place. This support may take the form of: writing and distributing case studies, promoting fund sponsored technical training, seminars, hosting contractor meetings and participating in associations through memberships and events. 2012 Plan, Chapter 3. C&I Programs, pp. 176 and 177.

The Companies intend to retain the current EO's incentive strategy using the retrofit strategies for meeting the needs of the LDCs' diverse customer base, including a more comprehensive approach to improving the overall performance of facilities participating in the program. The LDCs discovered over the years that flexibility has proven to be vital to implementing cost effective energy efficiency projects. The Companies intend to continue reviewing incentive levels to ensure that they are consistent with current and expected market conditions, customer investment options and approved budgets. Further, custom incentives will continue to be offered under the EO program. These incentives will be applicable to a wide range of energy savings technologies. Qualifying projects or Energy Conservation Measures (ECM) earn incentives based on a percentage of a project's cost, based on the amount of energy saved by the measure(s), up to a maximum dollar value. The incentive calculation for the EO program is based on the amount of annual energy savings, peak day demand savings, the project cost, the simple payback period and the measure's life expectancy. Additionally, the LDCs proposed to continue submitting projects under this program with incentives greater than $100,000 to the Authority for incremental budget approval. 2012 Plan, Chapter 3. C&I Programs, pp. 176 and 178.

Under this program, the LDCs testified they provide up to a $0.20 square foot prescriptive incentive for a "Cool Roof." The LDCs defined a Cool Roof as a roof that is either painted white or treated with a color that reflect the sun's energy. Additionally, the LDCs testified that the intent of the "Cool Roof" program is to provide incentives for roofs that have a very high reflectivity. Tr. 11/28/11, pp. 71-75; 2012 Plan, Chapter 3. C&I Programs, p. 234.

The LDCs plan to commit funding to make the roof of a building white or another reflective color through painting or some other method of treating that roof a new conservation measure. The testimony regarding this issue is limited and unclear. Therefore, the Authority will direct the LDCs to provide a report that:

1. fully describes the program, its intentions, and methods of achieving the programs goals;
2. details how many customers have participated in the program since its inception; and
3. provides the total amount of incentives paid under the program and the amounts paid to individual customers under this program.

For the 2012 Plan, the Authority approves this program pending more information in the Companies' compliance filing.

3. Business and Energy Sustainability Program

The LDCs proposed expenses of $400,000 for the Business and Energy Sustainability (BES) program, which was formerly the Operations and Maintenance (O&M) program. In addition, the LDCs estimated potential increased savings of $699,113 for this line item. The objectives of the BES program are to: (1) help customers improve the electrical and thermal efficiency of their buildings infrastructure through operational improvements and the adjustment of building controls, rather than capital investments; and (2) to provide customers with the knowledge and means to maintain equipment and system performance on an ongoing basis. Meeting the above cited objectives includes investigating ways of upgrading functioning, but inefficient equipment within the C&I programs; improving facilities' overall energy performance; and developing long-term sustainable energy savings relationships and plans with customers. 2012 Plan, Chapter 3. C&I Programs, p. 203.

The Companies stated that the best description of the BES program is that it is a "programmatic melting pot" that addresses capturing the potential energy savings from a combination of information-based behavioral changes and capital investments by the customer. This program was formally called the O&M program. However, the EEB and its consultants decided that the O&M terminology was too vague for this program and did not get to the heart of what the Companies were trying to accomplish. Under the BES program, the focus is on energy savings resulting from changes in individual or organizational behavior and decision making. The Companies cite as an example the BES' attempt to use various energy-use feedback mechanisms (e.g., the energy dashboard) to show customers how much energy they have used compared to another point in time. 2012 Plan, Chapter 3. C&I Programs, p. 203.

The BES program is divided into five components Retro-Commissioning (RCx), Process Re-engineering for Increased Manufacturing Efficiency (PRIME), Business Sustainability Challenge (BSC), Operations and Maintenance Services and Training and Outreach. Each of these programs are available to both natural gas and electric customers. 2012 Plan, Chapter 3. C&I Programs, pp. 203-209.

The Authority reviewed the proposed BES program and finds that this program should provide C&I customers with significant energy savings. The program seems to replicate the intention of other conservation programs that relate to training and educating C&I customers to manage their operations to conserve energy. Therefore, the Authority will approve the Business and Energy Sustainability Program for the 2012 Conservation Budget.

E. NATURAL GAS PROJECTS GREATER THAN $100,000

The Companies stated that they intend to continue to exclude natural gas projects that have incentives greater than $100,000 from the 2012 Conservation Budget. They plan to submit these projects to the Authority for approval under the conditions developed in the 2008 Conservation Decision. The LDCs intend to continuously increase the scope of the natural gas measures offered under the program in the 2012 budget year. For example, the LDCs have added incentives to encourage C&I customers to install high efficiency gas fired heat pumps along with low and high intensity infrared gas heaters. 2012 Plan, Chapter 3. C&I Programs, p. 164.

The LDCs stated that they use two different types of incentives under this program, one being the use of prescriptive incentive packages to promote the use of energy efficient boilers with rebates ranging between $4.00 per MMBtus, and $8.00 per MMBtus up to a limit of 2,500 million Btus per hour (MBH). For boilers with consumptions greater than 2,500 MBH the LDCs use a custom calculation where the company could apply a rebate of up to 75% of the incremental costs or up to $6.00 per ccf. The energy management systems are considered a retrofit scenario, where the

LDC uses 30% of the installed cost and compare it to the cost of $3.50 per ccf. The Companies stated that depending on the design and makeup of the energy management system installed, it could save more energy than a boiler and, therefore, provide a greater incentive to encourage that customer to implement that system. The LDCs testified that many of the projects submitted over the last two years under this program include a combination of lost opportunity costs as well as a being a retrofit conservation measure.

The second type of incentive relates to those measures described as non-prescriptive, which are a custom calculation. For example, one of the LDCs developed a non-prescriptive incentive for a swimming pool cover for an indoor municipal swimming pool. Since this facility saved both electric and natural gas, the Companies prorated the incentive based on the anticipated energy savings of both fuels. Based on that analysis, the LDCs assume that the energy savings associated with the swimming pool cover would result from a reduction in natural gas and electricity usage. The incentive was based on 30% of the total cost of the system and the energy comparison for gas was based on a savings of $3.50 ccf. In addition, the LDCs added to the incentive a $12 per square foot of pool incentive to promote the adoption of the measure. Southern applied a total incentive for this project of $19,845 of the total cost of the pool cover of $76,533. Southern estimated that this measure would save 5,670 ccf of gas a year and 28,350 ccfs over the life expectancy of this measure of five years. Southern estimated that the customer will save approximately $7,000 a year in energy costs as a result of the installation of this measure and a simple payback period of 8 years. Other conservation measures show a simple payback that is greater than the life expectancy of the conservation measure. Tr. 11/28/11, pp. 65-72; Response to Interrogatory ENG-8.

The Authority analyzed the incentive projects for each of the LDCs and discovered that for CNG, three out of ten projects that received incentives, had a payback period that was greater than its measured life expectancy. Southern shows a payback period for 32 out of 65 measures with a life expectancy that exceeds those measures. Yankee demonstrated that 3 out of 22 measures had payback periods that were greater than their respective life expectancy of the measure installed. Response to Interrogatory ENG-8. These anomalies appear to be related to specific types of measures, including energy management systems, burner controls and other retrofit conservation measures. Using Southern's assumed life expectancy for the swimming pool cover of 5 years, that customer would only save $35,437 (5 years * $7,087.50 annual savings) before the measure's life expectancy ends. Since the customer would save a total of $41,095 ($76,533 original cost - $19,845 incentive - $35,437 life-time savings), that customer would never recover its investment in the project.

A payback period for a measure greater than its life expectancy indicates that the customer(s) who installed the measure is not achieving any net savings compared to the capital cost of the measure including the conservation incentive. Based on the aforementioned, it appears that conservation funds are being expended without clear net conservation savings projections. The Authority finds that a clear set of rules must be developed regarding this program to ensure conservation dollars are spent in a prudent manner. Therefore, the LDCs will be directed to propose for Authority approval the conservation budget spending terms before conservation funds may be expended on any new projects.

Finally, the OCC recommended that the Authority maintain its current mechanism for approving C&I incentives over $100,000. The OCC believes that 30 days is not too long for a participant to wait to receive $100,000 or more of ratepayer money. Such projects should be carefully vetted by the Authority before being approved to ensure that large expenditures are being spent cost effectively. OCC Brief, p. 3. CNG and Southern recommended that in the event that the Authority requests additional information of the LDC during the initial 30-day period, that the project may move forward 15 days following the Authority's receipt of the requested information, unless, within that 15-day period, the Authority either rejects the proposed project or has a further request for information. If the latter is the case, then the same 15-day process would apply until no further request for information is made, in which case the project may move forward or it is rejected by the Authority. CNG/Southern Brief, p. 3.

The Authority reviewed its present adjudication process and finds that it is sufficient for an adequate review of projects that are over $100,000 and does not require any refinements at this time.

F. OTHER – ADMINISTRATIVE AND PLANNING

The LDCs proposed for inclusion in its 2012 Plan, budget expenses of $95,000 for Information Technology, $161,000 for Planning, $800,000 for Evaluation and $49,500 for the EEB, for a total of $1,105,500. In addition, the LDCs estimated potential increased savings of $142,500 for Information Technology, $241,500 for Planning, $1,200,000 for Evaluation and $74,250 for the EEB, a total of $1,658,250.

The LDCs stated that the three main objectives of the Energy Efficiency Fund are to advance the efficient use of energy, mitigate environmental impacts of energy generation and promote economic development and provide energy security. These objectives are combined with a mandate to educate and inform Connecticut's businesses, municipalities, residents and school children on the importance of using energy efficiently. 2012 Plan, Chapter 4, Education and Outreach, p. 235.

The Authority expects the funding of this budget item along with the funding available from the LDCs be made available to meet the educational mandate through a variety of programs including school-based programs (kindergarten through college), public forums, technical training and seminars, educational exhibits and centers, trade shows and community and grassroots outreach as outlined in the 2012 Plan. The Authority recognizes that Connecticut's energy education programs and initiatives are necessary to meet the important program goal to use energy wisely.

The Authority encourages the LDCs to continue with the education and outreach programs outlined in the 2012 Plan. In particular:

- The EEsmart program's goal is to facilitate students' understanding of math, science and technology related to energy conservation, renewable energy

resources and electricity in order to create an energy efficient ethic among Connecticut's school-age students.
- The Smartliving Center and Museum Partnerships program whose objective is to educate Connecticut residents about the importance of energy efficiency.
- The Clean Energy Communities program purpose is to encourage communities in Connecticut's towns and cities to invest in energy efficiency in buildings-schools, town halls, libraries, businesses, homes and apartments.

2012 Plan, Chapter 4, Education and Outreach, pp. 235-237.

Based on the aforementioned, the Authority approves the budgeted expense amount requested in this line item along with the proposed potential increased savings.

G. CONSERVATION ADJUSTMENT MECHANISM

The CAM is a factor calculated per ccf of gas consumed. It is based on the total budget allocated to each company divided by the estimated annual sales plus: 1) an estimation of the lost margin associated with the savings and benefits of conservation, and 2) a prior period over or under recovery plus interest based on each company's allowed rate of return. Further, the LDCs testified that they submit an annual true-up of the CAM factor at the end of January every year, when they true-up the actual spending and interest from the prior year. Response to Interrogatory ENG-4; Tr. 11/28/11, p. 27.

CNG submitted a hypothetical CAM of $0.0367 ccf based on the current conservation budget of $6,076,672 and estimated annual sales of 303,251,930 ccf. Southern submitted a hypothetical CAM of $0.0451 ccf based on a budget of $5,992,303 and estimated sales of 268,750,590 ccf. Both CNG and Southern used the same time period of March 31, 2012 through February 28, 2013, to estimate their respective sales. Each LDC intends to update their actual CAM factors based on the January 31, 2012 CAM filing, which will include actual expenditures for the final four months of 2011. The LDCs respective CAM factors would be trued up with actual data in the CAM, which is expected to be filed on January 31, 2012. None of the Companies indicated any range for the final CAM factor. CNG Response to Interrogatory ENG-4; Tr. 11/28/11, pp. 25-31.

CNG estimated a lost margin of $219,243 based on a cumulative savings of 81,939 Mcf. It also estimated an under-recovery of $4,774,535 for the period ended December 31, 2011 along with a total interest charged to the ratepayers of $68,149 for a total amount to be recovered through the CAM of $11,138,599 in 2012. Southern estimated a lost margin of $257,791 based on a cumulative savings of 97,824 Mcf. It had an under-recovery of $5,769,169 for the period ended December 31, 2011 along with total interest charged to the ratepayers of $88,050 for a total amount to be recovered through the CAM of $12,107,313. Further, CNG and Southern stated that the January 31, 2012 CAM filing will correct for any discrepancies between the actual and estimated numbers to be used in the CAM calculation. Id. Additionally, CNG and Southern indicated that their respective CAM filings in January 2012 will have a recalculation of the factor based on the Expanded Budget. Written Exceptions, p. 2.

Yankee estimated a CAM factor based on a conservation budget of $7,058,500 and estimated annual sales for 2012 of 390,627,100 ccfs. For 2012, the actual factor to be applied to customer's bills is estimated to be $0.0176 ccf. Yankee indicated it intends to update its CAM factor in its January 31, 2012 CAM filing for actual expenditures that occurred prior to January 1, 2012. Yankee testified that its January 31, 2012 CAM filing will have a true up of actual expenses, but does not expect a large change in the CAM factor. Yankee also indicated that the final CAM factor could range from $0.0176 per ccf to $0.0185 per ccf. Response to Interrogatory ENG-4; Tr. 11/28/11, pp. 25-31. Additionally, Yankee estimated a total lost margin for 2012 of a credit of $168,143 ($251,733 - $419,876). Yankee's lost margin for 2012 was calculated by subtracting its estimated lost margin of $251,733 for this period from the amount approved in its last rate case of $419,876. As a result of the conservation programs, the total estimated reduction in sales under the originally proposed conservation budget was equal to 883,800 ccf. Yankee Responses to Interrogatories ENG-4 and ENG-5; Tr. 11/28/11, pp. 25-31. As a result of the Expanded Budget, Yankee expects that the CAM will include a recalculation of the factor relating to the increased conservation funding. Written Exceptions, p. 3.

The OCC recommended in their brief that the Authority consider the Companies' 2013 conservation plan as part of its annual Conn. Gen. Stat. §16-19b proceeding to review the purchased gas adjustment clause (PGA) and the CAM. In their Written Exceptions, the OCC stated that "PURA approved the Increased Savings Budget level, but no funding or recovery mechanism for that budget. The OCC therefore requests that the PURA clarify, in its final decision, what its procedure will be for review and approval for any ratepayer funding and recovery method for such funding." Further, the Expanded Budget would significantly increase bills of C&I customers as the CAM is currently implemented and recommended that the Authority investigate ways to reduce the burden on the largest industrial customers. OCC Brief, p. 4; Written Exceptions, pp. 1 and 2.

Regarding the OCC's comments, the Authority refers the OCC to Decisions dated August 23 1995, in Docket No. 93-02-04, <u>Application of Connecticut Natural Gas Corporation to Amend Its Rate Schedules: Reopened</u>; Docket No. 92-02-19, Application of Yankee Gas Services Company to Increase its Rates and Charges: Reopened; Docket No. 93-03-09, <u>Application of The Southern Connecticut Gas Company to Increase its Rates and Charges: Reopened, p. 2</u>. It states that "[t]he Department approves the Companies' request to implement an annual CAM as discussed in the hearing, and exemplified by Yankee's filing dated October 20, 1994, to be developed and evaluated as part of the Annual Deferred Fuel Filing." Further, any change in the CAM from a volumetric factor to a class specific CAM would only shift the costs to the remaining ratepayers, which would then increase their financial burden for conservation funding. . Therefore, the Authority cannot change the current procedure for funding conservation programs without re-opening the Decisions cited above.

The Authority calculated the estimated savings and dollars spent through the CAM for each of the LDCs. Using CNG's estimated cumulative savings of 81,939 Mcf, which is 819,390 ccf (81,939Mcf * 10 ccf/Mcf) and its estimated conservation budget, CNG is spending $7.42 to save one ccf for the budget year ($6,076,672 / 819,390 ccf). Using the same analysis for Southern, it is spending $6.13 to save one ccf of gas

($5,992,303/978,240 ccf) and Yankee is spending $7.99 to save one ccf ($7,058,500 / 883,800 ccf). Since the conservation savings are stretched out over a life expectancy of a group of measures, the actual annual cost would be less than the numbers cited above. Finally, the Authority calculated the annual cost assuming that the average life expectance of all the measures in the combined conservation programs was 25 years. For CNG, the conservation programs would theoretically cost $0.30 per ccf ($7.42 / 25 years) on an annual basis for those customers that participated in the conservation programs. Using the same analysis, the conservation programs would cost $0.25 per ccf ($6.13 / 25 years) for Southern and for Yankee it would cost $0.32 per ccf ($7.99 / 25 years). This analysis is predicated on the assumption of using one year's conservation budget. Using the current commodity cost of gas of $3.345 MMBtu, or approximately $0.34 per ccf, the actual theoretical savings per ccf over the 25-year period is $0.04 a year ($0.34 ccf - $0.30 ccf) for CNG, $0.09 ($0.34 ccf- $0.25 ccf) for Southern and $0.02 ccf ($0.34 ccf - $0.32 ccf) for Yankee.

The LDCs originally filed an estimated CAM factor based on the Base Budget of $19,127,475. Response to Interrogatory ENG-4. As a result of the Authority's approval of the Expanded Budget of $34,203,989, the components included in the CAM for such items as the conservation budget, sales and lost margin will significantly increase. As a result, the LDCs will be directed to provide two calculations in their CAM true-up filing on January 31, 2012. First, the final 2011 CAM factor based on the actual closing expenditures as of December 31, 2011, which includes any over or under-recovery of the approved 2011 conservation budget of $16,870,075. Second, the new 2012 CAM factor resulting from the Expanded Budget of $34,203,989, which will be an update of the response to Interrogatory ENG-4.

H. BENEFIT COST ANALYSIS

The LDCs stated that they have continued to use similar benefit-cost screening tools within the 2012 Plan programs. The natural gas avoided costs that are used are based on a regional avoided energy supply cost study completed in 2011 for New England utility companies by Synapse Energy Economics.[2] The LDCs used the Connecticut Program Savings Documentation (PSD) to document savings assumptions and to highlight the 2012 program changes and the results of recent program evaluations. The PSD[3] provides engineering estimates, savings algorithms and measures life estimates used by the Companies within their programs. It also reflects the results of evaluations by providing realization rates to "true-up" savings. 2012 Plan, Chapter 6, Benefit Cost Analysis, p. 319.

The Authority expects that the use of common cost-effectiveness testing methodologies and savings assumptions will allow it and others to compare the benefits, costs and benefit/cost ratios to ensure that the programs are cost-effective and yield positive net benefits to the customers.

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[2] Avoided Energy Supply Costs in New England: 2011 Report, July 21, 2011, Synapse Energy Economics, Inc.

[3] The Companies' PSD is filed annually as part of the Electric and Natural Gas Companies' C&LM Plan. The PSD is a centralized reference of savings (energy, capacity, fossil fuel and other non-electric) assumptions used by the LDCs within the programs.

I. EXPANDED BUDGET

1. Companies' Proposal

The Companies proposed to increase the 2011 approved budget from $16,870,075 to $19,127,475 as part of their proposed 2012 Plan, which is a 13% increase year over year. The LDCs identified a Base Budget of $19,127,475 in their 2012 Plan. However, the LDCs stated the goal of Governor Dannel Malloy's administration is to make Connecticut the leading state regarding energy efficiency. Therefore, the Companies proposed an Expanded Budget of $15,076,514 to add to the Base Budget. The end result is a total budget of $34,203,989, which is a 78.8% increase over the proposed 2012 Base Budget. However, since the 2011 approved budget was $16,890,075, the actual increase would be $17,334,914. Consequently, the budget increases from year to year 103% as a result of the addition of the Expanded Budget. The 2012 Plan notes that private capital would need to be leveraged to deliver savings of the scale required to put Connecticut into the lead. 2012 Plan, Chapter 8, Increased Savings Scenario, p. 335. The table below compares the proposed 2012 conservation budget with the Expanded Budget.

Comparison 2012 Gas Conservation Base Budget Versus the Expanded Budget

	2012 Base Budget	2012 Expanded Budget	Increase	% Increase
Total Dollars Spent	$19,127,475	$34,203,989	$15,076,514	78.8%
Percentage of Gas Savings based on Annual Sales	.35%	.70%	.35%	100%

2012 Plan, Chapter 8. Increased Savings Scenario, p. 336

The suggested strategies to achieve the above estimated increase in savings includes performance contracting, leveraging of private capital, and significant state and municipal building efforts. These strategies would require additional funding. Although the amount of required funding has been identified, the source of that funding has not. There are a number of strategies to provide the funding, each with their own advantages and drawbacks. These considerations would need to be reviewed through the stakeholder process conducted by the EEB. Id.

Many of the goals embodied in the Act could be furthered by the adoption of the Expanded Budget. There are other objectives that require additional interpretation before the details of goal achievement could be identified. For example, the goal of weatherizing 80% of Connecticut homes by the year 2030. The fact that there is no definition of weatherization in the statutes requires consideration. This weatherization goal, and others like it, would also need to be worked out through the stakeholder process conducted by the EEB. 2012 Plan, Chapter 8. Increased Savings Scenario, p. 336.

The increased savings plan is consistent with making Connecticut a leader in energy efficiency. Id. The increased budget funding needs for the natural gas program could be accomplished using a combination of the CAM and Capitalization/Rates

(Decoupling or rate basing energy efficiency). To accommodate budget flexibility, the LDCs and EEB advocated the use of a rolling budget that can utilize funds from a future year to fund current year program activity.[4] 2012 Plan, Increased Savings Scenario, p. 337. Increased marketing efforts and expenditures also would be a necessary component of an Expanded Budget. The first track is primarily programmatic. The marketing strategies outlined in the base plan for each program would still be pursued, but at an increased level consistent with the increased budget and participation goals. The other track has traditionally been characterized as general awareness. 2012 Plan, Chapter 8. Increased Savings Scenario, p. 344.

The EPTB supports approval of the 2012 proposed Increased Savings Scenario and resultant budget of $34,203,989. To meet Governor Malloy's administration goal of making Connecticut the leading state in energy efficiency, the EPTB indicated that a significant ramp-up of current C&LM activity would be required. Though the LDCs have significantly expanded their C&LM programs and budgets, the EPTB noted that there is significant room for growth as the natural gas programs continue to play "catch up" with the more mature electric programs. Specifically, the EPTB stated that the Expanded Budget promotes the Act's energy goals of decreasing ratepayer costs and developing the state's energy-related economy. Brief, pp. 1 and 2; 2012 Plan, Chapter 8. Increased Savings Scenario, p. 336.

The EPTB further stated that this increase is appropriate because of the robust customer demand for the current conservation programs provided by the LDCs. The Expanded Budget promotes the Act's energy goals of decreasing ratepayer costs. Furthermore, the Expanded Budget in the 2012 C&LM Plan is consistent with Conn. Gen. Stat. §16a-35k, which establishes legislative findings and policy for the state regarding energy utilization and conservation. Specifically, Conn. Gen Stat. §16a-35k declares the policy of the state to include, among other things, conserving energy resources by avoiding unnecessary and wasteful consumption. EPTB Brief, p. 2.

ENE also strongly supported approval of the Expanded Budget . The Expanded Budget reduces natural gas consumption by 0.70% per year as compared to the LDCs total annual firm throughput. 2012 Plan, Chapter 8. Increased Savings Scenario, p. 336. This translates to a 96% increase, or $53 million, in savings for gas customers. ENE contended that the Expanded Budget for the gas programs will help lower energy costs, search for untapped and cost-effective efficiency savings, create jobs and economic benefits to the state, and help Connecticut achieve its economic, health and environmental goals. EEB Brief, p. 2.

Yankee acknowledged that the Expanded Budget identifies increases in the gas saving programs that are approximately double the savings outlined in the base plan. 2012 Plan, Chapter 8. Increased Savings Scenario, p. 335; Brief, p. 3. Yankee argues that the Expanded Budget should be approved. The LDCs also should be allowed to adopt the increased savings budget, allowing for a more consistent implementation of the across customer segments and conservation programs. Yankee Brief, pp. 3 and 4. The EPTB also supported the approval of this scenario and its proposed budget of

[4] This practice has been utilized in previous plans and the LDCs have accounting mechanisms in place to borrow from subsequent plans.

$34,203,989. EPTB Brief, p. 1. The OCC did not express an opinion on the additional proposed $15,076,514 Increased Saving Scenario.

2. Base Budgets Effect on LDCs Top 10 Customers' Bills

The three LDCs provided exhibits showing the estimated impact the proposed 2012 conservation Base Budget would have on each of their top 10 customers. As shown below, these customers contribute a significant portion of each LDC's conservation budget. Each of the tables below was developed based on the assumption that the 2012 Plan is approved as submitted. As stated earlier in this Decision, the proposed joint LDCs conservation Base Budget of $19,127,475 is allocated to the LDCs in the following manner: CNG $6,076,672, Southern $5,992,303 and Yankee $7,058,500,

Conservation Base Budget Effect on CNG's Top 10 Customers

Customer No.	Annual Usage (ccf)	Annual Bill Including CAM Charge[1]	Annual Natural Gas Bill w/o CAM Charge	Annual CAM Charge ($/year)	CAM Charges over 19 years	Tariff (Rate Class)
1	6,771,300	$3,460,004	$3,314,508	$145,497	$2,764,438	LGS
2	3,166,190	$1,609,606	$1,541,573	$68,033	$1,292,622	LGS
3	2,321,060	$412,087	$362,214	$49,873	$947,591	LGS-FT
4	1,890,710	$363,302	$322,676	$40,626	$771,898	LGS-FT
5	1,781,070	$303,185	$264,914	$38,270	$727,136	LGS-FT
6	1,747,750	$892,251	$854,697	$37,554	$713,533	LGS
7	1,696,940	$327,417	$290,954	$36,463	$692,789	LGS-FT
8	1,172,020	$213,613	$188,430	$25,184	$478,487	LGS-FT
9	1,149,540	$571,169	$546,469	$24,700	$469,309	LGS
10	1,071,170	$577,605	$554,588	$23,017	$437,314	LGS
			Total	**$489,217**	**$9,295,123**	

Conservation Base Budget Effect on Southern's Top 10 Customers

Customer No.	Annual Usage (ccf)	Annual Bill Including CAM Charge	Annual Natural Gas Bill w/o CAM Charge	Annual CAM Charge	CAM Charges over 19 years	Tariff (Rate Class)
1	2577900	$611,266	$549,738	$61,528	$1,169,033	LGS-FT
2	2095410	$515,407	$465,395	$50,012	$950,232	LGS-FT
3	1640370	$413,303	$374,151	$39,152	$743,879	LGS-FT
4	1404730	$350,526	$316,999	$33,527	$637,021	LGS-FT
5	1270640	$310,686	$280,359	$30,327	$576,213	LGS-FT
6	1251045	$313,516	$283,657	$29,859	$567,327	LGS-FT
7	1181500	$309,844	$281,644	$28,199	$535,790	LGS-FT
8	1089230	$892,988	$866,991	$25,997	$493,947	LGS
9	1064470	$296,313	$270,907	$25,406	$482,719	LGS-FT
10	1011860	$265,439	$241,288	$24,151	$458,861	LGS-FT
			Total	**$348,158**	**$6,150,022**	

Conservation Base Budget Effect on Yankee's Top 10 Rate 30 Customers

Customer No.	Annual Bill Including CAM Charge1	Annual Natural Gas Bill w/o CAM Charge	Annual CAM Charge	CAM Charges over 19 years
1	$9,717,132	$9,478,146	$238,986	$4,540,734
2	$4,843,815	$4,732,113	$111,701	$2,122,319
3	$3,991,835	$3,894,476	$97,359	$1,849,821
4	$3,301,367	$3,220,234	$81,133	$1,541,527
5	$2,565,647	$2,508,643	$57,004	$1,083,076
6	$2,077,146	$2,031,008	$46,138	$876,622
7	$1,708,063	$1,666,133	$41,930	$796,670
8	$1,793,419	$1,753,599	$39,819	$756,561
9	$1,591,303	$1,555,274	$36,029	$684,551
10	$1,502,429	$1,466,513	$35,916	$682,404
		Total	**$786,015**	**$14,934,285**

2012 Plan, Chapter 1. Overview, p. 47; Response to Interrogatory EN-23.

The Authority analyzed the total Base Budget effect on the top 10 customers from each LDC service territory and discovered the following. CNG's top 10 customers contribute 8.1% to that company's conservation budget, Southern's top 10 customers contribute 5.8%, while Yankee's top 10 customers contribute 11.1%. Over the next 19 years, the top 10 customers from each LDCs service territory together should expect to pay $30,379,430 towards conservation assuming that there are no changes to the budgets and no change in the allocation of conservation funding to these customers. Based on the LDCs' testimony, they anticipate the current budget numbers to be reasonable to meet the state's conservation goals. However, during the next 19 years, firm customers are estimated to pay a total of $363,422,025 towards conservation over the 19 year period. This cost to the customer relates to the natural gas conservation budgets and does not relate to the electric conservation budgets. Under the original proposal of $19,127,475 for 2012, CNG's Customer No. 1 would contribute $145,497 towards the conservation budget. Based on the Expanded Budget of $34,203,989, each of the LDC's No 1 customers would see a 78% increase in their conservation contribution such that: CNG's Customer No. 1 would increase from $145,497 to $258,985; Southern's Customer No. 1 would increase from $61,528 to $109,519; and Yankee's Customer No. 1 would increase from $238,986 to $425,395.

The LDCs testified that larger customers pay a greater portion of the conservation budget but would receive large incentives to obtain higher gas savings. Four of the customers in CNG's service territory have participated in the conservation programs since its inception. However, CNG indicated that two of six projects are under development and have not been completed, while the remaining four projects have been completed. Southern indicated that its Customers No. 4 and No. 7 have participated in its conservation programs. Yankee indicated that only one customer participated in the conservation programs. However, that project has not been completed as of the end of November 2011. Response to Late Filed Exhibit No. 1. The table below shows which of the top ten customers from each of the LDCs participated along with their respective incentives and amount of energy savings.

Largest Participating Customers as of November 2011

LDC	Customer No.	Incentive Paid	Annual Savings in ccf	Lifetime Savings in ccf
Yankee	7	$11,726	27,572	220,556
CNG	2	$37,297	61,806	309,030
CNG	4	$3,000	2,850	34,200
CNG	4	$4,000	1,873	28,095
CNG	4	$1,000	950	11,400
CNG	7	$14,474	22,209	222,090
CNG	9	$94,195	15,699	235,485
Southern	4	$91,839	37,847	235,485
Southern	7	$43,421	38,669	580,029
	Total	**$400,952**	**$270,915**	**2,515,810**

Id.

The Expanded Budget of $34,203,989 is a $15,076,514 or a 78% increase in the budget for the 2012 Plan. Over the 19-year period, these customers would pay $54,903,050 ($2,889,634 * 19). The implications for the largest consuming customer (Yankee's Customer No. 1) would be $425,395 ($238,986 * 1.78) annually or $8,082,507 ($425,395 * 19 years) over the 19-year period. The 19-year period is from 2011 to 2030, which is the mandated time period in the Act for the completion of the 80% weatherization of residential units.

3. C&I and Residential Customer Impact

A C&I customer in CNG's territory on General Service with an annual consumption of 30,000 ccfs would pay $1,101 in 2012 under the original Conservation Base Budget proposal and $1,960 with the inclusion of the Expanded Budget. A Southern General Service customer with 30,000 ccfs usage would pay $1,353 under the original proposal and $2,408 under the increased scenario. A Yankee General Service customer with an annual consumption of 20,000 ccfs would pay $352 under the original proposal and $627 under the increased scenario. The Authority also calculated the total Small General Service increase for a C&I customer, which includes the Expanded Budget. This would result in a CNG Small General Service customer, with a consumption of 5,000 ccfs per year, receiving a total increase in annual bills of $143.13; for a Southern customer, $175.89; and for a Yankee customer, $68.64.

Likewise, residential customers would see a 78% increase in their CAM as a result of the Expanded Budget. For instance, an average CNG residential customer that uses 750 ccfs of gas a year would pay $27.75 a year under the original proposal toward conservation and $48.98 with the inclusion of the Expanded Budget. In Southern's service territory, this type of residential customer would pay $33.83 a year, which would rise to $60.23 a year. A Yankee customer with the same consumption would pay $13.20 year, which would increase to $23.48 a year. Customers benefit directly from participating in conservation programs. All ratepayers should benefit from lower prices if demand is reduced as a result of conservation.

4. Discussion

The Authority reviewed the Expanded Budget and the EPTB, Yankee, EEB and ENE recommendations' to increase the 2012 conservation budget to $34,203,989 for the three LDCs. The total increase that will be experienced by customers is not the difference between the proposed 2012 Conservation Budget and the Expanded Budget, but it is the difference between the 2011 conservation budget of $16,870,075 and the Expanded Budget of $34,203,989. This results in an increase to firm customers from 2011 to 2012 of $17,334,914 or 103%, as opposed to the proposed 2012 increase of $2,257,400 or 13% over the 2011 conservation budget. Under the Expanded Budget, the total cost to the LDCs' ratepayers would be $649,875,791 ($34,203,989 * 19 years).

Under the proposed Expanded Budget, the CAM factor submitted as part of the Base Budget, which is shown as an independent line item on each customer's bill, would rise from the proposed rate of $0.0367 ccf for CNG's customers to $0.0653 ccf. Therefore, an average customer using 750 ccf a year would experience an increase from $27.75 ($.0367 * 750 ccf) to $48.98 a year ($0.0653 ccf * 750 ccf). For Southern, a proposed Base Budget CAM factor of $0.0451 ccf for its customers would increase to $0.0803 ccf. A Southern residential customer using 750 ccf a year of gas would experience an increase from $33.83 a year ($0.0451 * 750 ccf) under the Base Budget to $60.23 a year ($0.0803 ccf * 750 ccf) under the Expanded Budget. For Yankee, a proposed Base Budgeted CAM factor of $0.0176 ccf would rise to $0.0313 ccf. A Yankee residential customer using 750 ccf a year would see their bill increase from $13.20 a year ($.0176 * 750 ccf) under the Base Conservation Budget to $23.48 a year ($.0313 ccf * 750 ccf) with the Expanded Budget.

5. Summary

The 2012 Plan sets forth an Expanded Budget as a way to meet a stated goal of Governor Malloy to make Connecticut the leading state in energy efficiency. The Expanded Budget proposes broad short-term initiatives, long term planning, budget needs, short term approaches, expanded plan strategies, outcomes and caveats, performance incentives and marketing strategies. As pointed out in the 2012 Plan, and noted by Yankee and ENE in their briefs, the Expanded Budget should be a joint electric and gas initiative and in fact should also include initiatives for and funding from the oil industry.

In this proceeding, the Authority has the task of reviewing the Gas Company's C&LM Plan. Therefore, the discussion of Expanded Budget in this Decision has been limited to a discussion of the benefits and costs to gas ratepayers. The EPTB indicated in its brief that expanding cost-effective conservation opportunities better meets policy objectives than the base budget scenario. For the reasons stated herein and in the 2012 Plan, the Authority approves the expanded conservation budget of $34,203,989.

However, increasing the 2012 conservation budget by 103% in one year may be difficult to achieve. Based on the LDCs' testimony, their current marketing strategy and staffing is based on the Base Budget of $19,127,475. Therefore, the Authority finds it appropriate to require the LDCs to submit a detailed plan regarding the implementation of the Expanded Budget. This detailed plan will include, but not be limited to, how each of the following items related to conservation will be affected in 2012 for each LDC:

- marketing strategy;
- staffing levels;
- administration;
- verification procedures;
- participating customers by class;
- new measures to be included in each program; and
- program incentives.

Finally, the LDCs testified that they have not been able to spend the approved dollars on conservation programs in a given year. For example, the Authority approved a total budget of $11,543,747 for the LDCs in 2010. See, Decision dated March 17, 2010 in Docket No.08-10-02, DPUC Review of the Connecticut Gas Utilities Forecast of Demand and Supply 2009 – 2013 and Joint Conservation Plan, p. 78. However, the Companies did not spend all of the $11.5 million 2010 budget and rolled over $6 million unspent dollars into the 2011 new Residential Financing Loan program. See, 2012 Plan, Chapter 2. Residential Programs, p. 68. Apparently, the LDCs were unable to spend the entire approved 2010 conservation budget in accordance with the specifically approved program allocations. When the Authority approves a conservation budget, it also approves the allocation of the dollars to specific programs for that given year. The LDCs should not be changing the approved amount of monies to any program without Authority approval. Since the LDCs have not submitted their actual conservation program expenditures for 2011 to date, the Authority has no knowledge of whether the Companies either over- or under-spent the approved 2011 conservation budget of $16,870,075. Based on the aforementioned, the Authority will monitor the 2012 conservation budget through a compliance filing.

J. PROGRAM EVALUATION

The Connecticut Energy Efficiency Fund stated the LDCs have a long history of providing efficiency programs to Connecticut's energy consumers. An integral part of creating, delivering and maintaining quality programs is performing independent evaluations of programs and the markets they serve. In 1998, the Energy Conservation Management Board, currently known as the EEB was formed and charged with the responsibility to advise and assist the utility companies in the development and implementation of comprehensive and cost-effective energy conservation and market transformation plans. In 2005, the EEB formed an Evaluation Committee to work directly with an EEB consultant in overseeing evaluation planning and completion. By the Decision dated May 7, 2009 in Docket No. 08-10-03, DPUC Review of The Connecticut Light and Power Company's and The United Illuminating Company's Conservation and Load Management Plan for 2009, the Authority directed the EEB's Evaluation Committee and its consultants to be independent from and totally responsible for all aspects of the evaluation process.

In the Decision dated January 6, 2011 in Docket No. 10-10-04, DPUC Review of the Connecticut Gas Utilities Joint Conservation Plans, the Authority expressed concern regarding the evaluation process in the 2011 plan and deferred the full discussion on program evaluation to Docket No. 10-10-03, DPUC Review of The Connecticut Energy Efficiency Fund's Conservation and Load Management Plan for 2011. Decision 10-10-04, dated January 6, 2011, p. 11. The investigation into the evaluation process in that docket demonstrated that the evaluation was neither independent nor transparent and was ordered by the PURA to be changed.

The Authority finds that the 2012 EEB Program Evaluation Plan (Evaluation Plan) contains an Evaluation Roadmap as ordered in Docket No. 10-10-03 and refined by the Act. The Evaluation Plan is designed to provide cost effective studies of the CL&M Programs. The programs that offer the most savings or the most uncertainty will be evaluated most frequently. The Evaluation Plan integrates gas and electric programs and takes advantage of opportunities to cooperate with others in the Northeast that offer the same types of measures as does Connecticut. Most importantly, the Authority finds that the Evaluation Plan provides for an independent evaluation process. The programs will be evaluated, measured and verified in a manner that provides confidence that the savings are real and in a manner that enables the Companies to use those savings' estimates and other results with confidence. The Evaluation Plan will provide critical studies with objectivity and with the best interests of Connecticut rate-payers in the forefront.

K. TABULAR PRESENTATIONS

The LDCs presented tables showing their budget projections for each conservation program for the period of 2006 through the proposed 2012 budget. As an example, the LDCs provided detailed information regarding the RNC program. The following table breaks out the RNC into seven categories, which are then subdivided into smaller classifications. The budget projections classification includes labor, outside services, materials and supplies, marketing incentive and administration expenses. The Energy Savings classification lists annual energy savings, lifetime energy savings, annual cost rate, lifetime cost rate, total gas benefit, total gas system benefit, homes served, lifetime savings per home, program cost per home and benefit cost per home. 2012 Plan, Chapter 2. Residential Programs, pp. 103-105. The LDCs also provided data regarding their respective RNC programs. Response to Interrogatory ENG-33. These responses include several new rows under the Energy Savings classification, that include the total annual ccf savings per home, which was derived by dividing the annual energy savings by the number of homes served; the total incentives cost per ccf saved, which was calculated by dividing the total incentives paid by the amount of lifetime energy savings; and the marketing cost per home, which was calculated by dividing the total lifetime energy savings by the annual energy savings. The following table shows the original information provided in the 2012 Plan and the new data discussed above.

Residential New Construction (RNC)

CNG

Year >>	2009	2009	2010	2010	2011	2011	2012
	Goal	Actual	Goal	Actual	Goal	Projected	Goal
Homes	150	116	101	152	64	181	107
Total ccf Annual Savings	37,800	27,705	30,194	39,202	27,797	22,311	29,480
Total Lifetime ccf Savings	945,000	692,626	754,853	980,060	694,916	557,750	736,990
Annual ccf Savings per Home	252	239	299	258	434	123	276
Total Incentives ($)	$171,100	$158,889	$171,100	$409,069	$251,545	$263,342	$251,545
Total Incentives/ Lifetime Savings	$0.18	$0.23	$0.23	$0.42	$0.36	$0.47	$0.34
Total Marketing Cost	$5,900	$4,361	$5,900	$1,839	$8,260	$8,260	$8,260
Marketing Cost per Home	$39.33	$37.59	$58.42	$12.10	$129.06	$45.64	$77.20
Average Measure Life	25	25	25	25	25	25	25

SOUTHERN

Year >>	2009	2009	2010	2010	2011	2011	2012
	Goal	Actual	Goal	Actual	Goal	Projected	Goal
Homes	150	71	101	32	54	123	90
Total ccf Annual Savings	37,800	20,308	30,194	9,381	23,301	18,192	24,796
Total Lifetime ccf Savings	945,000	507,718	754,853	234,532	582,520	454,800	619,898
Annual ccf Savings per Home	252	286	299	293	432	148	276
Total Incentives ($)	$171,100	$174,098	$171,100	$84,790	$210,860	$220,095	$210,860
Total Incentives/ Lifetime Savings	$0.18	$0.34	$0.23	$0.36	$0.36	$0.48	$0.34
Total Marketing Cost	$5,900	$3,371	$5,900	$1,336	$7,080	$7,080	$7,080
Marketing Cost per Home	$39.33	$47.48	$58.42	$41.75	$131.11	$57.56	$78.67
Average Measure Life	25	25	25	25	25	25	25

YANKEE GAS

Year >>	2009	2009	2010	2010	2011	2011	2012
	Goal	Actual	Goal	Actual	Goal	Projected	Goal
Homes	50	326	101	206	95	342	224
Total ccf Annual Savings	37,800	31,287	30,194	41,991	41,170	80,158	43,996
Total Lifetime ccf Savings	945,000	782,194	754,853	1,049,784	1,029,259	2,003,943	1,099,892
Annual ccf Savings per Home	252	96	299	204	433	234	196
Total Incentives ($)	$171,100	$267,049	$171,100	$422,541	$372,570	$619,912	$442,145
Total Incentives/ Lifetime Savings	$0.18	$0.34	$0.23	$0.40	$0.36	$0.31	$0.40
Total Marketing Cost	$5,900	$4,379	$5,900	$3,173	$11,500	$983	$11,500
Marketing Cost per Home	$39.33	$13.43	$58.42	$15.40	$121.05	$2.87	$51.34
Average Measure Life	25	25	25	25	25	25	25

The Authority reviewed the data and discovered that the total dollars required to encourage customers to save one ccf has significantly increased since the original goals were set in the 2009 program. In particular, the total dollars range from a goal of $0.18 ccf in 2009 to a goal of $0.34 ccf in 2012 for CNG and Southern. The incentives required to encourage Yankee customers to save one ccf has increased from a goal of $0.18 ccf in 2009 to a goal of $0.40 ccf for 2012. This indicates the LDCs need to spend more money during 2012 to save one ccf than in 2009. Therefore, it is clear that the lowest cost and easiest customers to conserve natural gas have already participated or do not desire to participate in the conservation programs. Further, the actual amount of incentives paid to save one ccf continually changes for the three LDCs from 2009 through 2011. This indicates each LDC offered different incentives during the 2009 – 2011 time period. Based on the above, it is clear that additional metrics are needed to track the progress of each conservation program and program effectiveness based on its unit cost to achieve ccf savings. Therefore, for each conservation program, the Authority will direct the LDCs to include in their respective tabular presentations, the unit cost associated with each of the following parameters: anticipated and actual budget expenditures, anticipated and actual total incentives paid and the anticipated and actual marketing expense that is necessary to save one ccf of gas. The unit cost for each of these metrics will be calculated by dividing their respective budget or expense components divided by the anticipated lifetime savings in ccf.

III. FINDINGS OF FACT

1. The 2012 Plan included a Program Evaluation Plan.

2. The 2012 Plan included an itemized proposed base budget of $19,127,475 for natural gas energy efficiency program funding.

3. The 2012 Plan included an itemized proposed Expanded Budget with a budget of $34,203,989 for natural gas energy efficiency programs.

4. The LDCs estimated base budget expenses of $5,544,135 for HES, $81,575 for the HES Low Income – Audits and $3,270,000 for the HES Low Income – Weatherization Program.

5. The primary funding source for the 2012 Plan is contributions from LDC customers through the monthly CAM.

6. The top 10 C&I customers in the LDCs' service territories will pay $1,623,390 in 2012 through the CAM for the conservation programs.

7. The top 10 customers have only used $400,952 in conservation funding since the inception of the programs.

8. The LDCs current residential HES programs are designed to serve approximately 12,000 customers a year with a total funding of $8.9 million.

9. The HES conservation program has a $75 co-pay.

10. The LDCs proposed a study to determine the actual number of customers that potentially remain to be weatherized in Connecticut but did not indicate a cost of that study.

11. During 2010, the HES conservation program served 34,296 homes and the HES-IE program served 15,347 homes.

12. Under the RNC, the Companies intend to work with local building officials and builders to help prepare the market for the expected transition to the 2009 IECC, which is expected to be adopted in mid-2012.

13. CNG and Southern consider a customer to be "on main," if that main passes in front of the customer's home. Yankee considers a customer to be "on main" if the company can install a (T) connection into existing main in a street, then it installs a distribution main through a development of homes.

14. During 2010, Yankee provided funding to 24 homes that were not on an existing main.

15. During 2011, Yankee provided funding under the RNC program to 18 homes that were not on an existing main.

16. The average size of the homes receiving conservation funding under the RNC in Yankee's service territory in 2010 was 3,151 square feet.

17. On January 1, 2011, the three LDCs introduced a new residential loan program by offering subsidized low interest rate loans with an on-bill repayment to HES residential customers. The new loan program uses shareholder capitol and $6 million of unspent 2010 energy efficiency funds.

18. The LDCs proposed a conservation budget for C&I customers of $7.25 million.

19. The LDCs are continually expanding the scope of gas measures under the C&I conservation programs.

20. The vision of the Energy Efficiency Fund's C&I programs is to create a cost effective support structure.

21. The LDCs' goal is to entice a sustainable and competitive business climate for Connecticut's businesses, state facilities, municipal facilities and industries based on bottom-line solutions for economic competitiveness, environmental stewardship and social responsibility.

22. The LDCs' proposed a base budget of $3,870,000 for the Energy Conscious Blueprint program.

23. Major building renovations and other code regulated events will likely dominate the ECB program activity for the next few years.

24. The building code has been phasing in greater conservation measures.

25. The EO program relies on marketing and direct interaction with contractors, engineers, ESCOs as well as repeat customers participation and word of mouth advertizing.

26. The Companies intend to retain the current EO's incentive strategy using the current retrofit strategies to meet the needs of the LDCs' customer base.

27. The LDCs will continue submitting EO projects with incentives greater than $100,000 to the Authority for incremental budget approval.

28. The BES program is intended to help C&I customers improve their efficiency of their buildings through operational improvements and adjustment of building controls.

29. The BES program is divided into five components: Retro-Commissioning, Process Re-engineering for Increased Manufacturing Efficiency, Business Sustainability Challenge, Operations and Maintenance Services and Training and Outreach.

30. The LDCs' use prescriptive and non-prescriptive methods to calculate incentives for projects with incentives of $100,000 and greater.

31. The 2012 Plan includes budget expenses of $95,000 for Information Technology, $161,000 for Planning, $800,000 for Evaluation and $49,500 for the EEB.

32. The 2012 CAM is calculated by dividing the proposed 2012 conservation budget by the estimated annual sales for 2012.

33. The LDCs' will submit a true-up of the CAM factor at the end of January 2012.

34. The CAM includes a Lost Margin and interest component.

35. The natural gas avoided costs in the 2012 Plan, are based on a regional avoided energy supply cost study completed in 2011 by Synapse Energy Economics.

36. The PSD provides engineering estimates, savings algorithms and measure life estimates used by the Companies within their conservation programs.

37. The LDCs believe that they will need to increase their current marketing strategies to meet the Expanded Budget.

38. The EPTB and ENE strongly supported approval of the Expanded Budget.

39. The Expanded Budget results in an increase of 103% over the 2011 conservation budget.

40. The 2012 Base Budget results in a 13% increase over the 2011 conservation budget.

41. The LDCs' calculated the life time energy savings of each conservation program by multiplying the annual savings by the life expectancy of the conservation measures installed.

42. In 1998, the ECMB was formed and charged with the responsibility to advise and assist the utility companies in the development and implementation of comprehensive and cost-effective energy conservation and market transformation plans.

43. In 2005, the EEB formed an Evaluation Committee to work directly with an EEB consultant in overseeing evaluation planning and completion.

44. The LDCs' provided an evaluation Roadmap as ordered in Docket No. 10-10-03.

45. The Evaluation Plan provides for an independent evaluation process.

46. The spending required to incentivize a customer to install conservation measures to save natural gas on a per unit basis has increased since 2009.

IV. CONCLUSION AND ORDERS

A. CONCLUSION

The Authority approves the LDCs' 2012 Base Conservation Budget coupled with the Expanded Budget for a total of $34,203,989. Any future increases in the conservation budget should be carefully evaluated by all parties involved to ensure that the costs of the programs produce real energy savings that are beneficial to customers. The impact on all ratepayers, both those participating and those not participating in conservation programs, must be evaluated to ensure all customers are treated fairly.

B. ORDERS

For the following Orders, submit one original copy of the required documentation to the Executive Secretary, 10 Franklin Square, New Britain, Connecticut 06051, and file an electronic version through the Authority's website at www.ct.gov/dpuc. Submissions filed in compliance with Authority Orders must be identified by all three of the following: Docket Number, Title and Order Number.

1. No later than February 1, 2012 and annually thereafter, each LDC shall provide a report to the Authority detailing any remaining conservation dollars from each program that was not spent in the previous year. Compliance with this Order shall commence and continue as indicated or until the Company requests and the Authority approves that the Company's compliance is no longer required after a certain date.

2. By March 1, 2012, for the HES and HES-IE programs, the LDCs individually shall submit the following:

    a. the actual number of homes completed versus the goals;
    b. the size in square footage and type of homes such as multifamily, condos or single family homes that participated in each program;
    c. the total incentives paid per home;

d. separately identify the measures installed for each home that corresponds to the incentives provided to the owner;
e. a statistical sample of 100 homes that participated in each of the above cited programs, include the date the measure(s) were installed, an analysis that shows the normalized and annualized sales for the 12 months before and after the measures were installed based on actual meter readings;
f. the total number of customers participating in the above cited programs, indicate the number of customers that have delinquent bills without standing balances of 30, 60, 90 and greater then 120 days over due;
g. the total number of customers with outstanding balances associated with these programs that as of December 31, 2011, the LDCs would consider as delinquent;
h. the total dollars spent on conservation measures related to customers that are considered delinquent and the customers' bills that will be included in Bad Debt Expense as of December 31, 2011; and
i. the total number of residential customers in each company's service territory and the number of homes that have participated in the weatherization programs since the inception of the conservation programs along with the total amount to date that has been spent under these conservation programs.

3. By March 1, 2012, the LDCs shall provide the following related to the "Cool Roof" program:

a. full description of the program's intentions and methods of achieving the programs goals;
b. the total number of customers that have participated in the program since its inception; and
c. the total amount of incentives paid under the program along with the individual amounts paid to customers under this program.

4. By March 1, 2012, the LDCs shall file a proposed set of terms and conditions regarding natural gas projects with incentives that are greater than $100,000 that determine how the LDCs will spend additional incremental conservation funds on any new projects.

5. By March 1, 2012, each LDC shall submit a detailed plan to the Authority showing the steps necessary to implement the Expanded Budget as discussed in Section II.I.5. Summary.

6. Starting with the first quarter of 2012 and quarterly thereafter, each LDC shall file an exhibit that compares their respective proposed conservation spending goals for the year versus the actual achieved results for each program for that quarter. This filing shall include the number of homes and businesses that participated in each program(s). Compliance with this Order shall commence and continue as indicated or until the Company requests and the Authority approves that the Company's compliance is no longer required after a certain date.

7. In next conservation plan, each LDC shall provide a working spreadsheet as described in Section II.C.2. Residential Programs.

8. The LDCs shall file in their next conservation plan, the tabular format described in Section II. K. Tabular Presentations, including the unit cost associated with each of the following parameters:

   a. anticipated and actual budget expenditures;
   b. anticipated and actual total incentives paid and the anticipated and actual marketing expense that is necessary to save one ccf of gas; and
   c. unit cost for each of the three above cited metrics will be calculated by dividing their respective budget or expense components by the anticipated lifetime savings in ccf.

9. In their next conservation plan filing, the LDCs shall submit their joint conservation plan as a separate plan filing from the EDCs unless there is legislation requiring that the LDCs and EDCs submit a joint plan to be reviewed by the same entity, either PURA or EPTB.

DOCKET NO. 11-10-03 PURA REVIEW OF THE CONNECTICUT ENERGY EFFICIENCY FUND'S GAS CONSERVATION AND LOAD MANAGEMENT PLAN FOR 2012

This Decision is adopted by the following Directors:

John W. Betkoski, III

Kevin M. DelGobbo

Anna M. Ficeto

CERTIFICATE OF SERVICE

The foregoing is a true and correct copy of the Decision issued by the Public Utilities Regulatory Authority, State of Connecticut, and was forwarded by Certified Mail to all parties of record in this proceeding on the date indicated.

K. Santopietro

Kimberley J. Santopietro
Executive Secretary
Department of Energy and Environmental Protection
Public Utilities Regulatory Authority

January 5, 2012
Date