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# **Enclosure D**

# **Hearing Report**

Prepared Pursuant to
Code of Federal Regulations Part 40, Section 51.102
Regarding Revision to the
State Implementation Plan for Air Quality

Hearing Officer: Kathleen L Knight



On October 21, 2016, the Deputy Commissioner of the Connecticut Department of Energy and Environmental Protection (DEEP) signed notice of intent to revise the State Implementation Plan (SIP) for air quality to address the Attainment Demonstration requirements for the Greater Connecticut Nonattainment Area and statewide Motor Vehicle Emissions Budgets (MVEBs). Pursuant to such notice, DEEP provided an opportunity for a public hearing and written comment. The notice was posted to DEEP's webpages for proposed actions and 2008 ozone attainment demonstration from October 24, 2016 through November 28, 2016. The hearing was held November 28, 2016 1:00-3:00 PM. Written comments were accepted through November 28, 2016.

# I. Hearing Report Content

This report describes the comments received during the comment period and together with DEEP's response's and the resulting revisions to the SIP as proposed for hearing.

# II. Summary of the Proposed SIP Revision

The Clean Air Act (CAA) requires states to submit SIP revisions to address the requirements of CAA 172 and 182(b) to demonstrate that an ozone nonattainment area classified as moderate will attain the standard by the required deadline. The proposed revision demonstrates how the Greater Connecticut Nonattainment Area will attain the 2008 ozone NAAQS by the deadline established for moderate nonattainment areas. The proposed attainment demonstration addresses all of the required elements under sections 172 and 182(b) of the CAA; including base and future year inventories, RACM demonstration, reasonable further progress goals, transportation conformity, photochemical modeling and contingency plans. Additionally, DEEP proposed statewide MVEBs to assure timely reductions from projects affecting motor vehicle emissions.

# III. <u>Comments and Responses</u>

The hearing was held as scheduled; no attendees were present and written comments were submitted only by EPA Region 1.

EPA's comments are copied below with DEEP's responses. Where the response results in change to the text the changes are indicated as follows: red text indicates insertions and strike through text indicates deletions.

# Nonattainment New Source Review

## Comment 1

The last paragraph on page 5 discusses Connecticut's new source review program. Connecticut must submit a nonattainment new source review (NNSR) State Implementation Plan (SIP) to EPA for the 2008 ozone National Ambient Air Quality Standard (NAAQS). The discussion below provides further information to assist CT DEEP in meeting this requirement.

On March 2, 2015, EPA published in the Federal Register the Implementation of the 2008 National Ambient Air Quality Standards for Ozone: State Implementations Plan Requirements. See 80 FR 12264. In this rulemaking, the Agency reiterated the requirements of Section 182 of the Clean Air Act (CAA or the Act).

Section 182 of the CAA contains the deadlines for states to submit revisions to their SIPS that meet the Act's nonattainment requirements, including regulations to implement the Act's NNSR permit program. The March 2015 rulemaking codified language pertaining to the deadline by which these elements must be submitted to EPA, requiring:

"For each nonattainment area, the state shall submit a nonattainment NSR plan or plan revision for the 2008 ozone NAAQS no later than 36 months after the effective date of the area's designation for the 2008 ozone NAAQS". See 40 CFR 51.1114"

With the effective date of designations for the 2008 ozone standard being July, 20, 2012, the due date for the NNST SIPS was July 20, 2015. See 77 FR 3088: May 21, 2012. Connecticut is subject to this requirement since Greater Connecticut and the New York- N. New Jersey- Long Island NY-NJCT Areas were designated as marginal nonattainment areas for the 2008 ozone standard.

Also included in the March 2015 rulemaking were revisions to EPA's NNSR requirements which sought to clarify a state's obligations in instances where an area was previously designated under an earlier ozone standard. See 40 CRF 51.165(a)(12) and 651.1105. These anti-backsliding regulations are applicable to states that have an area designated nonattainment for the 2008 ozone standard and that same area was designated nonattainment for the

1997and/or 1-hour ozone standard on April 6, 2015 (the day the 1997 standard was revokes). For these areas, which includes Connecticut's two ozone nonattainment areas, a state would need to demonstrate their SIP still retains the more stringent NNSR requirements, such as emission offsets and applicability thresholds that were in place due to the classification under the previous ozone standards.

Furthermore, the subsequent re-classification, or "bump-up" of several marginal areas (including Connecticut's two areas) to "moderate" (see 81 FR 26697) requires that such areas address the Clean Air Act requirements for moderate areas, including NNSR, by January 1, 2017.

The discussion of Connecticut's NNSR program on page 5 of the proposed attainment demonstration is not sufficient to meet the above requirements. The current discussion does not contain the detail required for certifying that Connecticut's NNSR SIP-approved program meets the 2008 ozone standard.

Specifically, in the proposal, CT DEEP states that the NNSR ratio within the Greater Connecticut nonattainment area is 1.2:1 due to that area's prior ozone classification of serious. This statement is consistent with EPA's antibacksliding provisions referenced above.

In addition, although it appears anti-backsliding provisions were considered when determining if the ratio of NNSR offsets is adequate, it does not appear this concept was applied when discussing the significant emission rate thresholds for a major stationary source. In describing the major source, the discussion in the proposal references the fact that the state's currently within the Ozone Transport Region and is designated marginal nonattainment for the 2008 ozone standard instead of discussing the anti-backsliding provisions which require serious NNSR provisions to still apply within the Greater Connecticut nonattainment area.

To assist CT DEEP in determining whether its NNSR SIP is adequate for the 2008 ozone standard we are enclosing a checklist entitled "Nonattainment New Source Review (NNSR) SIP/Regulatory Elements Checklist for Ozone (see Enclosure 2) that EPA recently developed to assist states in meeting the NNSR requirements for the 2008 ozone standard discussed above. If CT DEEP finds their current, NNSR SIP adequately meets the NNSR requirements for the 2008 ozone standard, the could submit to EPA a certification that supports this finding. The certification must clearly identify the basis for determining that the NNSR SIP meets the 2008 ozone standard. The CT DEEP could provide such a certification by linking the NNSR provisions in the checklist to the equivalent citation in the state's approved NNSR SIP. Since the certification must be in the form of a SIP revision that has been subject to public comment, the CT DEEP may want to combine NNSR certifications for the Greater Connecticut are and the New York-N. New Jersey-Long Island NY-NJCT area with the attainment demonstration that CT DEEP plans to propose in the near

future for the New York- N. New Jersey- Long Island NY-NJ-CT nonattainment area.

## Response

DEEP appreciates the checklist as a means to provide the specificity that EPA desires and has included it as an appendix to the attainment demonstration. Connecticut has revised the language by adding the two sentences to the end of the paragraph to provide the clarification EPA requested. It will now read as follows:

• Emission offsets from new major sources and modifications for marginal areas are required at a ratio of 1.1 to 1. When Connecticut was reclassified to moderate the ratio was required to be 1.15 to 1. However, because the Greater Connecticut area had, under prior designations, been classified as serious nonattainment, offsets have continued to be required at a more stringent ratio of 1.2 to 1. Because Connecticut is in the OTR, the new source review major source threshold is reduced from the usual 100 tons per year for a moderate area to 50 tons per year for sources emitting VOCs [CAA 184(b)(2)]. Connecticut's rules for obtaining offsets from new and modified sources, as well as other new source review requirements are contained in RCSA 22a-174-3a. Connecticut defines major sources and major modifications in RCSA 22a-174-1, and the thresholds are at least as stringent as required for moderate nonattainment areas located in the ozone transport region. This stringency is required by EPA's anti-backsliding provisions. Further details demonstrating that Connecticut's SIP adheres to the requirements for nonattainment new source review can be found in Appendix A.

Connecticut does not believe it is necessary to re-notice the SIP to fulfill 40 CFR51.1114 requirements. Attainment demonstrations have historically addressed the adequacy of the NSR program's role in achieving emissions reductions applicable to nonattainment areas. Connecticut addressed its NSR program in a similar way in its 2008 attainment demonstration for the 1997 ozone NAAQS. In this current SIP revision Connecticut described the necessary elements of the NSR program relevant to the Greater Connecticut nonattainment area and it addressed its history of nonattainment at more stringent designations and stated that it retains those more stringent elements.

Connecticut's brief description and general regulatory citation were sufficient for EPA to provide comment on whether the program was as stringent as is required. The notice for this SIP revision stated that it was to fulfill requirements under sections 172 and 182(b) of the Clean Air Act. These sections address the NNSR and anti-the backsliding provisions applicable to the Greater Connecticut nonattainment area. Therefore, anyone looking to comment on the adequacy of our SIP with respect to major NNSR had adequate notice and opportunity, as did EPA.

Nevertheless, not later than submittal of the attainment demonstration for the NY-NJ-CT nonattainment area, Connecticut will provide public notice of the adequacy of its nonattainment new source review provisions and submit the certification of adequacy to EPA as a SIP revision.

# Motor Vehicle Inspection and Maintenance (I/M) Program

## Comment 2

On page 6 we recommend that CT DEEP also reference the State of Connecticut Department of Motor Vehicles' I/M regulations at C.G.S 14-164c which have also been approved into the Connecticut SIP (see 73 FR 74019; December 5, 2008).

# Response

DEEP has added the citation the text now reads:

Connecticut's I/M rules are established in RCSA 22a-174-27 and in CGS 14-164c and regulations adopted thereunder and have been approved into the SIP on December 5, 2008 (see 73 FR 74019).

#### Comment 3

CT DEEP should provide more detail on how the requirement to imple ment a Basic I/M program is satisfied. The discussion on page 6 is not sufficient, and should be better spelled out in the final submission of the Greater Connecticut Attainment Demonstration SIP.

Specifically, CT DEEP should reference that the state has previously adopted, and is currently implementing, an enhanced motor vehicle Inspection and Maintenance (I/M) program, and that EPA has approved the program and revisions to the program (see 73 FR 74019; December 5, 2008 and 80 FR 13768; March 17, 2015) as meeting the requirements in the Clean Air Act and federal I/M rule at 40 CFR Part 51 Subpart S.

In addition, CT DEEP should describe that by being classified as moderate nonattainment, the State is required to implement a Basic I/M program per CAA section 182(b)(4). However, according to section 40 CFR 51.350(a)(1) of the federal I/M rule, areas/states within the OTR are required to implement enhanced I/M programs in any Metropolitan Statistical Area (MSA) having a population of 100,000 or more. This is also emphasized in section III.E. of the proposed and final "SIP Requirements Rule" for Implementation of the 2008 Ozone NAAQS (see proposed rule at 78 FR 34194; June 6, 2013 and final rule at 80 FR 12283; March 6, 2015).

Furthermore, CT DEEP should describe its approach for opting to implement a "Statewide" enhanced I/M Program as opposed to a combination of Basic I/M throughout the state with patches of I/M required for MSAs (for example, to avoid the scenario where Connecticut motorists can register vehicles in parts of the state that may have more relaxed I/M requirements than other parts).

CT DEEP also needs to provide details on how the requirements of Basic I/M program are met. That is, CT DEEP can also describe how the Enhanced I/M program is more effective than a Basic I/M program. CT DEEP can explain that a Basic I/M program is a subset of an Enhanced I/M program as shown by comparing program parameters:

Basic I/M Programs	Enhanced I/M Programs
<ul> <li>Requires onboard diagnostic (OBD) testing on Model Year (MY) 2001 and new vehicles</li> <li>Requires Idle testing of vehicles MY 2000 and older vehicles.</li> </ul>	<ul> <li>Requires OBD testing on MY 1996 and newer vehicles</li> <li>Requires more comprehensive tailpipe testing of MY 1995 and older vehicles</li> </ul>
Emission Control Device Inspection :     None	• Emission Control Device Inspection: Visual inspection for the presence of catalytic converter and other major emission control equipment.

## Response

DEEP continues to maintain the statewide I/M program as stated in the proposal. DEEP did not intend the introduction description to be the entirety of the I/M description, additional information on the I/M program was included in Section 4.2. However, DEEP appreciates EPA's specific suggestions and has added additional clarifying language and a header to the description in Section 4.2, see the changes to the paragraph on page 49 below.

## Connecticut's I/M Program

Section 22a-174-27 of the Regulations of State Agencies (RCSA) and section 14-164c of the Connecticut General Statutes (CGS) codify Connecticut's I/M standards and implementation respectively. Title 40 CFR part 85 requires Connecticut to adopt and implement an I/M program that meets federal basic I/M requirements statewide. Additionally, because Connecticut is in the Ozone Transport Region (OTR) portions of

Connecticut's nonattainment areas are required to implement an enhanced I/M program pursuant to CAA 184(b)(1). Connecticut requires the enhanced program statewide, thus exceeding the federal requirements. All elements of the basic program are included in the enhanced program.

Connecticut has required in-use vehicles to undergo periodic emission inspection and maintenance since 1983. The program has been modified over the years to meet CAA-required enhancements and to accommodate technological advancements in new vehicles such as on-board diagnostics (OBD).

Whereas EPA's I/M requirements only cover gasoline powered vehicles up to 8,500 lbs gross vehicle weight rating (GVWR), Connecticut's I/M program increases the number of vehicles subject to the enhanced standard by testing both gasoline and diesel motor vehicles through 10,000 lbs. GVWR.

EPA has approved revisions to the program in both 2008 and 2015 as being in conformance with requirements of an enhanced I/M program (see 73 FR 74019, 80 FR 13768). The table below demonstrates the basic requirements and the enhanced I/M program requirements.

Basic I/M Programs	Enhanced I/M Programs
<ul> <li>Requires onboard diagnostic (OBD) testing on Model Year (MY) 2001 and new vehicles</li> <li>Requires Idle testing of vehicles MY 2000 and older vehicles.</li> </ul>	<ul> <li>Requires OBD testing on MY 1996 and newer vehicles</li> <li>Requires more comprehensive tailpipe testing of MY 1995 and older vehicles</li> </ul>
Emission Control Device Inspection : None	Emission Control Device Inspection: Visual inspection for the presence of catalytic converter and other major emission control equipment.

This approved enhanced I/M program will continue to be implemented statewide and remains an important control strategy.

# Base and Future Year Emissions Estimates

#### **Comment 4**

Section 4.1.1 of CT DEEP's proposal states, "Section 182(a)(3) of the CAA requires states with moderate or above ozone nonattainment areas to prepare periodic emission inventories every three years, starting in 1990, estimating

actual emissions from all sources." We note that Connecticut's current obligation to prepare a periodic emission inventory stems from its designation as a non-attainment area for the 2008 ozone NAAQS; it does not continue as a requirement from Connecticut's nonattainment status for the one-hour ozone standard. See 40 CFR 51.115.

# Response

DEEP agrees and has amended the first paragraph of section 4.1.1 to the below to read as follows:

## 4.1.1 Connecticut's 2011 Periodic Emissions Inventory

Section 182(a)(3) of the CAA requires states with marginal or above ozone nonattainment areas to prepare periodic emission inventories every three years, starting in 1990, estimating actual emissions from all sources. In March of 2015, EPA's implementation rule 1 for the 2008 ozone NAAQS established the requirements for a base year inventory and a periodic inventory every three years thereafter for states to satisfy sections 182(a)(1) and 182(a)(3) of the CAA. The implementation rule also established 2011 as the preferred base year for determining future year RFP compliance and for performing photochemical grid modeling.

As required, CT DEEP has regularly prepared PEI updates since the original inventory submission for 1990. The 2011 PEI<sup>2</sup>, was submitted in final form to EPA as a SIP revision on March 9, 2016, after completion of the required public review process. The 2011 PEI provides both annual and typical high ozone summer day estimates of actual VOC and NOx emissions for each county in Connecticut, with sources grouped into the following general categories:

## **Comment 5**

Although Connecticut previously adopted an emissions statement program to meet the requirements of section 182(a)(3)(B) of the CAA, pursuant to EPA's implementation rule for the 2008 ozone NAAQS, the state needs to submit a certification that the previously adopted continues to meet the requirements of the CAA for the purposes of implementing the 2008 ozone NAAQS. This is emphasized in section III.J.2 of the final "SIP Requirements Rule" for Implementation of the 2008 Ozone NAAQS (see the final rule 80 FR 12291; March 6, 2015). The certification needs to be a SIP revision subject to a public comment process. CT DEEP could accomplish this by including the emissions statement certification for both state's nonattainment areas in the forthcoming proposal of its attainment demonstration SIP for the Connecticut portion of the New York-N. New Jersey- Long Island. NY-NJ-CT area.

<sup>&</sup>lt;sup>1</sup> "Implementation of the 2008 National Ambient Air Quality Standards for Ozone: State Implementation Plan Requirements" (the Implementation Rule); 80 FR 12264; March 6, 2015.

<sup>&</sup>lt;sup>2</sup> The 2011 PEI SIP submittal, with full documentation, is posted on the CT DEEP website at: <a href="http://www.ct.gov/CT DEEP/cwp/view.asp?a=2684&Q=432056&CT DEEPNav GID=1619">http://www.ct.gov/CT DEEP/cwp/view.asp?a=2684&Q=432056&CT DEEPNav GID=1619</a>.

## Response

Connecticut intends to satisfy EPA's recommendation and is currently pursuing a SIP revision regarding the emission statement program.

No changes to the text of the Greater Connecticut attainment demonstration are required as a result of this comment.

#### Comment 6

Connecticut, along with other states in the Northeast, relied upon an emissions projection tool for electric generating units (EGUs) developed by the Eastern Regional Technical Advisory Group (ERTAC). The ERTAC EGU projection model uses hourly data from EPA's Air Markets Program (AMP) and fuel specific growth rates from the Energy Information Agency and National Energy Reliability Corporation to estimated future year emissions from this section. The resulting EGU projections for Connecticut for 2017 are reasonable when compared to base year (2011) emissions and 2015 actual emissions from EPA's AMP database.

The June 10, 2016 technical support document for the 2011 inventory and 2017 projection available on the website for the Mid-Atlantic Regional Air Management Associate (MARAMA) indicates that a key aspect of the model is the provision of state-specific information on EGU retirements, fuel switches, new units and controls. CT DEEP should include within the attainment demonstration narrative a summary of the input it provided to the ERATC model developers regarding these, and any other, state-specific information.

## Response

DEEP has edited section 4.3.1 Growth and Control Methodologies Used to Project 2017 Emissions, as indicated below.

The ERTAC tool uses base year EPA Clean Air Markets Division (CAMD) data and fuel specific growth rates developed primarily from Energy Information Agency (EIA) and National Energy Reliability Corporation (NERC) data to estimate future activity and emissions. The 2017 MARAMA Beta inventory uses EGU estimates calculated with ERTAC v2.5. A complete description of the ERTAC tool and its use for developing 2017 emission projections is included in the MARAMA TSD for the 2011 and 2107 beta inventories. As noted in the MARAMA TSD, state specific input is also incorporated when necessary. CT DEEP provided MARAMA with the state specific inputs, including changes to SO2 emissions for several simple cycle combustion turbines. Connecticut also verified that ERTAC projections accounted for the retirements of: AES Thames Unit A and B, Bridgeport PSEG Unit 2, and Norwalk Units 1, 2 and 10.

CT DEEP used the ERTACv2.5 results to develop unit level ratios of 2017 to 2011 ozone season emission estimates. Those ratios were then applied to the corresponding 2011 PEI unit level summer day emissions to calculate 2017 summer day emission estimates.

# **Control Measures Included** in Future Year Projections

#### **Comment 7**

Table 4-7 and the discussion in section 6.2 indicate that CT DEEP recently proposed two NOx Control regulations, 22a-174-22e pertaining to requirements for major sources, and 22a-174-22f pertaining to the requirements for non-major sources, and anticipates final adoption of these regulations by December 31, 2016. We note that these regulations should be submitted to EPA as SIP revision in order for EPA to be able to approve the state's reasonable available control technology (RACT) SIP, which was submitted to EPA on July 18, 2014.

## Response

RSCA 22a-174-22e and 22a-174-22f and the other proposed regulations outlined in Table 4-8, will be submitted as SIP revisions after the regulations are final. DEEP has updated Table 4-8 to indicate the current status of the proposed regulations.

# Reasonable Further Progress (RFP)

#### **Comment 8**

CT DEEP correctly points out that NOX emissions from the state's banking program need to be accounted for in the RFP plan. CT DEEP accomplished this by translating the banked emissions of 255 tons/year into a value of 0.7 tons/day, and then added this value to the 2011 base year and the 2017 projection year. We note that the insertion of the banked emissions into the 2011 base year is not necessary given that it is known the banked emissions were not used then, provided that the full amount of banked emissions is added to the projection of emissions to 2017, which was done. This ensures that if the banked emissions are consumed by 2017, Connecticut's RFP plan will have accounted for that possibility.

## Response

DEEP appreciates EPA's comment and explanation and recognizes that including the offsets in the base year leads to a slightly higher reasonable further progress (RFP) goal. While not necessary, DEEP has used this method in the past and is comfortable with the slight increase to RFP. DEEP feels that a conservative approach is appropriate.

No changes were made as a result of this comment.

# Motor Vehicle Emission Budgets (MVEBs)

## **Comment 9**

Table 7-3 on page 85 includes the 2017 MVEBS for the "Southwest Connecticut Nonattainment Area". EPA is not able to evaluate these budgets at this time since CT DEEP has not yet proposed its reasonable further progress and attainment demonstration SIPs for this area. EPA will not take action, or make adequacy determination, on MVEBs for the 2008 ozone NAAQS for the Southwest Connecticut nonattainment area, until a SIP revision meeting the requirements for reasonable further progress or an attainment demonstration is submitted for that nonattainment area. The criteria by which EPA determines whether a SIP's MVEBs are adequate for transportation conformity purposes are outlined in 40 CFR 93.118(e)(4).

## Response

DEEP acknowledges that EPA would not be able to evaluate these budgets for southwest Connecticut for the purpose of meeting the requirements of 40 CFR 93.118(e)(4). It was not CT DEEP's intent to submit these for that purpose. Rather, CT DEEP proposed the budgets for Southwest Connecticut as a SIP strengthening measure. As CT DEEP describes in section 7.3, the purpose of these budgets is to "...streamline the transportation planning process for CT DOT and the local MPOs and to more quickly establish tighter emission budgets for Southwest Connecticut until the full attainment plan for that area can be completed. Gaining approval of 2017 budgets for both areas will enable CTDOT and the MPOs to use a single set of consistent MOVES2014a inputs for both areas and avoid confusion during the [DOT project] public review process. More importantly, the proposed 2017 budgets for Southwest Connecticut are much more stringent than those currently in place."

This approach is similar to CT DEEP's April 17, 2007 SIP submission for SIP strengthening MVEBs for the southwest portion of Connecticut, which was approved by EPA October 29, 2007 (see 72 FR 50059).

Currently, transportation projects are evaluated with budgets established for 2009 under the 1997 standard, strengthening these budgets will assure air quality improvement not only for the Southwest portion of the state but also for Greater Connecticut as this nonattainment area is

downwind. In addition, expedient adoption is of greater importance as Connecticut moves forward with several transportation initiatives in the next several years and the first conformity period approaches.

DEEP encourages EPA to accept these budgets in the interim until DEEP submits an approvable attainment plan for Southwest Connecticut and fully evaluate the southwest budgets with respect to the requirements of 40 CFR 93.118(e)(4).

# Attainment Demonstration

#### Comment 10

With regard to footnote 92, we realize that this proposal was most likely prepared before the final Cross State Air Pollution Rule (CSAPR) Update modeling was available. See 81 FR 74504; October 26, 2016. We recommend that CT DEEP modify text in Section 8 to show the results of the final CSAPR Update modeling. In addition, it is our understanding that 2017 Ozone Transport Commission (OTC) modeling is also now available. Therefore, we recommend that CT DEEP update the OTC modeling discussion. The attainment year for this area is 2017, and the OTC modeling currently referenced in the proposed attainment demonstration is for 2018.

# Response

DEEP has revised section 8 Attainment Demonstration to reflect the newest CSAPR update modeling released with the final rule and has also included the recently released OTC modeling results. All results are consistent with the earlier modeling which indicates attainment in the Greater Connecticut Area is likely to occur on time.

# **Energy Efficiency and Renewable Energy**

## **Comment 11**

As part of its weight of evidence discussion, CT DEEP rightly acknowledges the state's robust energy efficiency (EE) and renewable energy (RE) programs, and the impact that they have in reducing electrical demand in the state. In order to move towards more integrated planning between energy and environmental programs, we suggest that in future SIP submittals CT DEEP devote more attention to the impact these programs have in reducing NOx emissions in the state. For example, Figure 9.1 contains a graph of electrical demand with and with state's EE programs and indicates that in 2024, 14% more electrical generation would need to be produced to meet annual electrical demand if the states EE programs were not in place. Additionally figure 2 contains a graph showing that Connecticut would need approximately 9% more electrical capacity to meet peak demand in 20204 were it not for the

stat's EE programs. We encourage CT DEEP to translate these energy savings into NOx emissions reductions to emphasize the connection between greenhouse gas reduction programs, which many EE/RE programs were developed for, and ozone control efforts. One readily available technique to accomplish this type of translation is EPA's Avoided Emissions and Generation Tool (AVERT). See for example EPA's discussion of this with the recently proposed rule for implementation of the 2015 ozone NAAOS (81 FR 81305; November 15, 2016). Connecticut should continue to explore the development of programs that would make an impact for both greenhouse gases and NOx emission reduction efforts. In particular, programs that help to reduce peak demand, such as increased deployment of solar power, siting commercial scale battery storage facilities in electrically constrained areas, and dynamic pricing of electricity would all help curtail consumption of electricity generated by fossil fuels during peak hours. Doing so may remove the need for infrequently used, high NOx-emitting EGUs from needing to run during such times.

# Response

DEEP appreciates EPA's comment and will consider methods of better quantifying energy efficiency and renewable energy emission's reductions in future SIP submittals.

# Minor Edits/Typographical Errors

## Comment 12

On page i, in the "Motor Vehicle Emissions Budgets" section of the Executive Summary, CT DEEP should specify that the established budgets are for the year 2017 and that such budgets apply to the 2017 and all future years, until future budgets are established.

## Response

DEEP has amended the cited paragraph to incorporate the clarification, see below.

**Motor Vehicle Emissions Budgets**. Statewide motor vehicle emissions budgets were established in collaboration with the Department of Transportation. The Greater Connecticut area is budgeted 15.9 tons of volatile organic compounds per day and 22.2 tons of nitrogen oxides per day. The three counties outside of the Greater Connecticut area are budgeted 17.6 tons of volatile organic compounds per day and 24.6 tons of nitrogen oxides per day. Annual

transportation improvement plans subject to transportation conformity will adhere to these budgets for 2017 and all-future years, until future budgets are established.

#### Comment 13

The Table of Contents on page iv should list the Appendices that are a part of the Greater Connecticut Attainment Demonstration.

In addition, the Titles for the Appendices on the Connecticut CT DEEP webpage and the and the Appendices cover pages, should be revised to be consistent with one-another, and reflect what is actually included in each Appendix. For example:

Webpage reads: "Appendix B: PEI Revisions and MOVES Inputs"

Appendix cover page Reads: "2011 Base Year Inventory for RFP: Revisions made to 2011 PEI"

Webpage, Appendix Cover Page, and Table of Contents should correctly read: "Appendix B: Revisions made to 2011 PEI, 2011 Bae Year Inventory for RFP, and MOVES 2014a Input Summary."

# **Response:**

DEEP has edited the appendices accordingly.

## **Comment 14**

The MOVES2014a Input Files, should also be included as an Appendix.

## Response

DEEP has included the input files as Appendix D.

## **Comment 15**

*The last sentence on page 7 should be revised as follows:* 

"..precursor emissions that are transported into the Connecticut."

## Response

The change was made.

# **Comment 16**

The web link provided in footnote 11 on page 40 is broken and should be replaced with:

<u>https://www.epa.gov/moves/moves2014a-lateste-versions-motor-vehicle-emissions-simulator-moves</u>

Furthermore, it seems CT DEEP developed the text in the attainment demonstration prior to EPAs migration of some of the agency's webpages. CT DEEP should check all of the links found throughout the attainment demonstration, revise, and broken links as necessary.

# Response

DEEP has revised all links as necessary.