Peer Review Record for the Clean Energy-Environment Guide To Action

I. Background and The Charge:

Date Issued: August 15, 2005

Instructions to Reviewers of the Clean Energy-Environment Guide to Action

Background

Across the country, states are taking action to help bring clean, cost-effective, reliable energy to the marketplace. For example,

- Twenty-two states have adopted public benefit funds that provide $2 billion annually to support cost-effective clean energy;
- Eighteen states and the District of Columbia have adopted renewable portfolio standards (RPS) that will increase the amount of wind, solar, biomass, and other renewable resources in their energy portfolios; and
- Existing RPS commitments are expected to support more than 25,000 megawatts (MW) of new renewable energy by 2017 – enough power for nearly 17 million homes.

Still, much more can be done. EPA estimates that if each state were to implement cost-effective clean energy-environment policies, the expected growth in demand for electricity could be cut in half by 2025 and more demand could be met through cleaner energy supply. This could mean annual savings of more than 900 billion kilowatt-hours (kWh) and $70 billion in energy costs by 2025, while preventing the need for more than 300 power plants and the greenhouse gas emissions equivalent to those from 80 million of today's vehicles.

Overview of the Guide

The Guide to Action has been developed by EPA to help states learn what is underway and working in other states and develop cost-effective clean energy programs that meet their environmental, energy, and economic goals. The Guide:

- Identifies and analyzes a suite of cost-effective state clean energy policies and describes best practices, key features, and examples of effective implementation.
- Provides information on analytical tools and methods states use to quantify emission reductions and estimate energy and cost savings.
- Links states to relevant guidance and technical support resources.

The Guide addresses the following clean energy programs and topics:

- Improving energy efficiency in residential and commercial buildings
- Developing renewable energy and combined heat and power supplies for electricity generation and transportation fuel markets
- Removing institutional, regulatory, and market barriers to clean energy at the state level

A growing number of states across the country are interested in learning about successful clean energy actions so that they can reap the environmental and economic benefits that clean energy has to offer. States can use the Guide to Action to:

- Evaluate clean energy options and identify programs and policies that could be applied in their state.
- Identify the roles and responsibilities of key decision-makers, such as environmental regulators, state legislatures, public utility commissioners, and state energy officers.
- Access and apply technical assistance resources, models, and tools available for state-specific analyses and program implementation.
- Learn from each other as they develop their own clean energy programs and policies.

Tasks

We would like you to assess the adequacy of this document as a guide to help states develop and adopt clean energy policies that meet their environmental, economic and energy goals.

Specific Questions:

We ask you to answer/comment on any or all of the following, depending upon your level of interest and expertise:

1) Is the organization of the document appropriate and does it present the material in a clear and concise manner? Please explain fully.

2) Are the explanations of the policies technically accurate and clear? Please be as specific as possible.

3) Are the state examples the best choices given your knowledge and experience? Do you have other/better examples? Please describe.

4) Does it give you the right level of information to determine which policies might be worth pursuing in your state(s)? Please explain what additional information you would want to see.

5) Are there elements missing from the Guide which you think need to be included or which would strengthen the document? Please explain in detail.

Please organize your review around the five questions above and try to clearly distinguish between each question when presenting comments. If there are other comments that do not fit neatly in the above categories, we would appreciate it if you could present them in a category called “Other”.

Please submit your review electronically in an email or word processing format of your choice (e.g. Word Perfect or Microsoft Word) **by September 16, 2005** to Denise Mulholland at mulholland.denise@epa.gov. If you have any questions, please contact her via email or at 202-343-9274. In advance, thank you for your time and valuable insight.

Note: On September 23, 2005, the deadline was extended to October 6, 2005 for Chapter 6 because of a production delay.

II. Reviewers Invited to Comment

Reviewers were invited to comment based upon their technical expertise in the areas of energy, economics and the environment. This expertise pertained to systems (e.g. energy, economy, air quality, etc.) knowledge as well as policy (e.g. deisgn, impacts, experiences, etc) knowledge. Many were also invited because they would be potential users of the final product and EPA wanted to ensure that it contained the information states and localities needed in the most straight-forward format.

Reviewer	Organization	Email/Contact Info	Date Comments Recv'd	Areas of Comments (X where Comments Received)							
				General Comments	Exec Summary	Chap 1	Chap 2	Chap 3	Chap 4	Chap 5	Chap 6
Carol Leftwich	ECOS	leftwich@sso.org									
Amy Royden-Bloom,	STAPPA-ALAPCO	aroyden-bloom@4cleanair.org	9/19/2005	X				X			
Chris James	CT DEP	chris.james@po.state.ct.us	10/3/2005	X							
Ron Methier	GA DNR	Ron_methier@dnr.state.ga.us									
Michelle New	NASEO	mnew@naseo.org									
John Davies	KY Energy	john.davies@ky.gov	9/9/2005	X				X	X	X	
State energy person (2)											
Matthew Brown	NCSL	matthew.brown@ncsl.org	9/16/2005	X		X	X	X			
Howard Geller	SWEEP	hgeller@swenergy.org	ETA 10/12/2005								
Marty Kushler	ACEEE	mgkushler@aol.com									
Jeff Deyette	UCS	jdeyette@ucsusa.org									
Rich Sedano, David Moskovitz, Cheryl Harrington	RAP	rapsedano@aol.com, davidmosk@aol.com,rapmaine@aol.com	9/20/2005	X		X	X	X	X	X	
Eric Heitz	Energy	eric@ef.org									

	Foundation										
Judi Greenwald	Pew Center	GreenwaldJ@pewclimate.org									
Rob Sargent	PIRG	rsargent@pirg.org									
Jerry Kotas, John Brown, Dan Beckley	DOE/NREL	jerry.kotas@ee.doe.gov,john_brown@nrel.gov	9/7/2005 - from Dan B								
Ryan Wiser, Mark Bollinger	LBNL	,RHWiser@lbl.gov, MABolinger@ lbl.gov								X	
John Byrne	UofD	jbbyrne@udel.edu	9/15/2005	X		X	X	X	X	X	X
Becky Wig,	MW EE Alliance	rwigg@mwalliance.org , 312-587-8390 x17	will not comment								
Greg Keoleian,	UMich Ctr for Sustainable Systems	gregak@umich.edu									
Andrew Spahn	NARUC	Aspahn@NARUC.ORG									
Blair Swezey	NREL	Blair_Swezey@nrel.gov	9/23/2005							X	
Rob Gramlich	AWEA	rgramlich@awea.org									
Steve Clemmer	UCS	sclemmer@ucsusa.org									
Rick Morgan	DC PSC	rmorgan@psc.dc.gov									
Steve Kalland	IREC, NC Solar Center	steve_kalland@ncsu.edu									
John Jimison	USCHPA	uschpa-hq@admgt.com									
David Wooley	Energy Foundation	dwooley@ef.org									
Tom Franciewicz,	Ozone Transport Commission	tomf@otcair.org									
John Jimison	USCHPA	uschpa-hq@admgt.com									
Phyllis Reha	MN PUC	Phyllis.Reha@state.mn.us									
Jeanne Fox	NJ PSC	jeanne.fox@bpu.state.nj.us									

Craig Hanson	WRI	chanson@wri.org									
Gabe Petlin	Green E Program	gpetlin@resource-solutions.org									
KM Keating	BPA	kmkeating@bpa.gov									
Larry Mansuetti	USDOE	lawrence.mansueti@hg.doe.gov	10/6/2005								X
Rhone Resch	SEIA	rresch@seia.org, tel. 682-0558	9/13/2005							X	
Devra Wang	NRDC	dwang@nrdc.org	10/2/2005								X
Sue Cloakley	NEEP										
Stacy Angel	USEPA	angel.stacy@epa.gov	9/19/2005	X		X		X			X
Sue Gander	USEPA	gander.sue@epa.gov	9/23/2005	X					X	X	

III. Comments from Reviewers with EPA Response

a. Reviewers Who Submitted Comments & Affiliations:

- James Bush, John Davies, Kentucky Office of Energy Policy
- Colin Murchie, Rhone Resch, Solar Energy Industries Assoc
- John Byrne, Noah Toly, Center for Energy and Environmental Policy, University of Delaware
- Matthew Brown, National Council for State Legislatures (NCSL)
- Amy Royden-Bloom, State and Territorial Air Pollution Program Administrators and Association of Local Air Pollution Control Officials (STAPPA ALAPCO
- Stacy Angel, USEPA
- Rich Sedano, Regulatory Assistance Project (RAP)
- Blair Sweezey, National Renewable Energy Lab (NREL)
- Sue Gander, USEPA
- Linda Silverman/Dan Beckley, USDOE EE/RE
- Chris James, CT Department of Environmental Protection
- Devra Wang, Natural Resources Defense Council (NRDC)
- Larry Mansuetti, USDOE
- Howard Geller, Southwest Energy Efficiency Project (SWEEP)
- Cheryl Harrington, RAP

b. General Over-arching Comments

GENERAL/OVERARCHING COMMENTS	**Minor Edit (M)**	**Discuss (D)**	**Lead who made changes where applicable**
The use of "chapter" and "section" is intertwined in the document. Pick one term and stick with it.	X		SVD
An entire section on calculating the benefits of clean energy policies would be much more useful.		*X*	*ALL – mention*

• Currently, indications of benefit calculation methodologies are spread throughout the document and therefore necessarily consist of little more than indications of what externality values should be calculated.			*benefits when describing costs*
• This capability is arguably the weakest point of policy design in the states, far weaker, for instance, than the ability to gather other relevant policies for comparison or "lessons learned," which seems to be the main thrust of this document as is.			
• Recent work (especially that of Robert Margolis at NREL) has produced a great deal of information on this regard that is newly complete, well-documented, and highly relevant, but not as yet well known.			
Generally, the document is very clear. It is long, yet each passage does seem concise, while maintaining perspective and pointing out links to other parts of the document – all good qualities. I also like the use of text boxes and the way they are used.			n/a
Very well organized, easy to read and loaded with examples.			n/a
For the most part, yes, the policies are accurate and clear.			n/a
States policies selected for more detailed examination are appropriate.			n/a
Mostly, the examples are quite good. I have a few better examples (Rich Sedano – as noted in other comments).			n/a
Any state would be wise to follow the suggestions in this document.			n/a
Actions to spur energy conservation are absent from the document. This could be misunderstood to suggest that conserved energy is not a form of clean energy.		X	Include - SVD – Intro; SG - PBF

Energy efficiency is the subject of Chapter Four. Renewable energy is the main topic of Chapter Five. Distributed generation receives less attention in the document (there is no chapter-length treatment of the subject). While DG might warrant a section unto itself, at least it might be included more prominently in Section 5.6, "Emerging Approaches" (in which case, the current title of 5.6 might remain unchanged while the subtitle should be revised to reflect its concern with both rate structures and distributed generation). Or it might be included in Chapter Six, which had not yet been prepared at the time the draft was		X	ESIB

made available for review.			
I hope there is a good table of contents and an index to capture cross-referenced topics in the very large piece.	X		N/A
GENERAL/OVERARCHING COMMENTS	**Minor Edit (M)**	**Discuss (D)**	**Lead**
The combined effects of Katrina and Rita on fuel prices really underscore the importance of clean energy. At 16c/kwh [current prices in much of the NE now, and expected to increase], PV is competitive now, and not just in "niche" applications. I didnt read every word in the guide, so this may be in there. But, I think a reference to projects like Staples and Sun Edison [where rooftops are being leased, the electricity being generated by the PV can be treated like a long term bond, part of a diverse portfolio], having references to projects like these would be helpful. NJ [Mike Winka] is best contact now on this.			
Another thought is something at the end to "tie it all together". There are a lot of examples in the various chapters, it would be great to have a short concluding section that sums up the benefits. Have a short list of many of the common policies and include their air quality and related benefits. This would also help states put together their ozone and fine PM SIPs.	X		SVD - Intro
Throughout the document, RE and EE project developers and/or the trade associations representing them need to be identified as required participants in the policy design stage. (Currently…represented in relatively few such listings.) Utilities are identified as such throughout; however, their interests are frequently not aligned with policy goals of efficiency or increased usage of DG, and their preferential inclusion vs. the countervailing interests of DG, CHP, or efficiency developers has proven an effective means of limiting the impact of many state clean energy proposals. (Similarly, these stakeholders should have one consistent designation throughout …are currently variously identified as developers, trade groups, etc.)	X		ESIB
The document throughout criticizes solar as a costly or “the costliest” renewable option, even to the point of editorializing about its advisability in the Arizona EPS. This tends to contribute to misleading perceptions of the value of solar energy as a *retail source* of *peaking* electricity, and would tend to encourage out-of-hand dismissal of this valuable resource without additional analysis.		X	ESIB

In general, mentions of the increased cost associated with renewable options are best balanced with some mention of their increased benefits – presumably the driver behind policymakers consulting this manual, and one to be reinforced continually, (as otherwise, policy paradigms will tend towards easily intuitive costs, vs. those benefits which require explicit analysis.)		X	ALL – include benefits when mentioning costs
GENERAL/OVERARCHING COMMENTS (continued)	**Minor Edit (M)**	**Discuss (D)**	**Lead**
The document tends to overemphasize development from scratch of idiosyncratic state policies, at best using other states as a source of ideas or policy segments. An increased emphasis on using preexisting models would be welcome, as currently the process of "reinvention of the wheel" and relearning the same lessons in state after state's clean energy policy regimes is consuming thousands of staff-years of time and tens of millions of dollars. This is especially salient and critical in the interconnection section.			n/a
Section headings, in addition to page numbers, would be very helpful in page footers.	X		SVD
This report is very comprehensive and clearly show(s) a great deal of work on your part. Congratulations on that. I think that somewhere up front it would be helpful to have a prominent statement suggesting that people not try to read the whole thing at once, necessarily, but to use it for specific interests in, say, the RPS. It's almost overwhelmingly comprehensive. As far as overall organization goes, I think it's good, although there is some duplication that I've noted in a few places.			SVD
I think that the explanation of the policies is clear. The one thing I'd add, as you've done in a few places, is maps indicating the states that have adopted the policies. That's helpful, and breaks up the text.			ALL
I think that the references to other studies and to other state activity will be particularly helpful.			N/A
One stylistic note – you say "states have found" about 150 times in the report. I know what you're trying to do here, and it's good to cast what you're saying in that light. See if you can use a different set of words occasionally though.		X	N/A
… it would be really helpful to have a full table of context and page numbering that reflects chapter and subchapter numbers. Imagine that's already part of your plan for final production.	X		SVD
Great report with a lot of good information! I really like the			N/A

reference lists as well, and how each within sections that will work well as stand alone documents.			
Great document! Cuts at issues many different ways, which is helpful. Lots of examples – good! I like the "best practices" boxes.			N/A
Consider adding headers/footers to each page to tell which policy/chapter it is -- will make it easier to flip through if people are using the full printed document	X		SVD
Wherever there is a map of a state, make sure the text or the map itself lists out the actual state names -- makes it much easier for folks to see exactly who is doing what -- especially for the more geographically challenged among us	X		SVD

GENERAL/OVERARCHING COMMENTS	**Minor Edit (M)**	**Discuss (D)**	**Lead**	**How comment was handle**
An entire section on calculating the benefits of clean energy policies would be much more useful.		*X*	*ALL – make sure benefits are acknowledged when costs are discussed*	
• Currently, indications of benefit calculation methodologies are spread throughout the document and therefore necessarily consist of little more than indications of what externality values should be calculated.				Benefits of RE are explicitly identified on page 2
• This capability is arguably the weakest point of policy design in the states, far weaker, for instance, than the ability to gather other relevant policies for comparison or "lessons learned," which seems to be the main thrust of this document as is.				Need specific guidance on where else to state benefits

GENERAL/OVERARCHING COMMENTS	**Minor Edit (M)**	**Discuss**	Lead	**How comment was handled**

• Recent work (especially that of Robert Margolis at NREL) has produced a great deal of information on this regard that is newly complete, well-documented, and highly relevant, but not as yet well known.				Contacted Robert Margolis by phone and he indicated that his work in this area was still being finished and should be available soon
Throughout the document, RE and EE project developers and/or the trade associations representing them need to be identified as required participants in the policy design stage. (Currently…represented in relatively few such listings.) Utilities are identified as such throughout; however, their interests are frequently not aligned with policy goals of efficiency or increased usage of DG, and their preferential inclusion vs. the countervailing interests of DG, CHP, or efficiency developers has proven an effective means of limiting the impact of many state clean energy proposals. (Similarly, these stakeholders should have one consistent designation throughout …are currently variously identified as developers, trade groups, etc.)	X		ESIB	Project developers and trade assoc. identified as key participants
The document throughout criticizes solar as a costly or "the costliest" renewable option, even to the point of editorializing about its advisability in the Arizona EPS. This tends to contribute to misleading perceptions of the value of solar energy as a *retail source* of *peaking* electricity, and would tend to encourage out-of-hand dismissal of this valuable resource without additional analysis.		X	ESIB	Softened the wording in the AZ section on p. 12
In general, mentions of the increased cost associated with renewable options are best balanced with some mention of their increased benefits – presumably the driver behind policymakers consulting this manual, and one to be reinforced continually, (as otherwise, policy paradigms will tend towards easily intuitive costs, vs. those benefits which require explicit analysis.)		X	ALL – include benefits with costs	Mentioned benefits for solar on p. 12 AZ As addressed in the Interconnection section, when individual states develop consistent interconnection policies there is a reduction in costs.

c. Comments by Section with Lead and Response

CHAPTER 1: INTRODUCTION **EPA LEAD: Steve Dunn**	**Minor (M)**	**Discuss (D)**	**Notes**
I'd like to see the objective of the Guide as stated in the box on page 1 of Section 1 brought closer to the sixteen items listed in Table 1.2. Something simple: Section 1 is the intro to clean energy, Section 2 is the goal to create an action plan, and Sections 3 through 6 are items that you can select from (the "toolbox") to complete your plan.	X		Added box 'using the guide' on p. 11
Chapter One briefly reviews "Environmental Challenges" and "Energy Challenges." A corresponding review of "Social Challenges" might also be appropriate.		X	
A bibliography was not provided with the draft, but parenthetical references were included in the text. One of these, on page 2 of Chapter One, refers to (Science 2005). Is that an accurate citation, or is there an author of the Science article?	X		
Page 1: Note that appliance efficiency standards first may be not the best given the energy bill.	X		Switched order
State very early in the report that you're dealing with electricity, not transportation. It might not be a bad idea to give a bit of context here, regarding the contribution of electric generation vs. transportation to air pollution.	X		Box added on transport
Under Transmission Systems, I'm staring at the words "pricing inequities" and wondering if that's the best word to use there. How about "needlessly high prices."			n/a
What is Clean Energy: Just a question -- what about "clean coal" technology? I know that's not in the general list of questions you're addressing, and it has its issues. But is it worth mentioning here? It's getting a great deal of attention these days.	X		n/a
The Energy Benefits of Clean Energy: define "peak power" for the reader	X		Defined
p. 5 Renewable energy: It's safe to say that wind, solar and geothermal are always in the definition (geo may not always apply outside the west), biomass is always included too. The 4 cents quoted as the low end for wind may be high in some places -- with the PTC it's less. Don't know how you want to treat the PTC	X		Modified listing and adde

though.			d info on EPA CT and PTC
CHAPTER 1: INTRODUCTION (continued) **EPA LEAD: Steve Dunn**	**Minor (M)**	**Discuss (D)**	**Notes**
p. 6 a nitpick, but under CHP, I'd say that the process captures (as opposed to produces) useful thermal energy (2nd paragraph)	X		Done
p.7-8 I'm a bit overwhelmed by the number of tables here. I know you're trying to present different ways of thinking about the policies, but it might be too much all in one place -- so much that they end up getting ignored perhaps.	X		Removed table 1.3
The Federal Partnerships section is good in what it includes but it seems a little pasted in at the end of the chapter. Could it be put in an appendix? The same with the references section on pp. 12-13.	X		Moved to appendix C
Another nitpick thing: Under Information Resources, the transmission primer that I did with Rich Sedano referenced under "General Articles about Ratemaking" is indeed available through the RAP website, but I'd rather have people go to the National Council website, since it's a council product that a RAP person happened to co author. That address is www.ncouncil.org	X		Edit made
Page 2 - Energy Challenges			
- Increase focus on reliability and security, these are issues of strong political support at this time. You could increase focus on reliability by taking it out of the intro sentence under "Energy Challenges" and make it a seperate bullet. Could also add a security bullet (I have some good security papers from RAP we could review for language).		X	Added bullet on security and reliability
- Regarding the bullet starting "Many existing base load generation plants are aging" - I see the retrofit issue as aging, but the hydro comment could fit better under a "reliability" bullet and the nuke thing under a "security" bullet. I'm didn't make the connection of hydro and nuke to "aging."	X		Edit made.
- Modify sentence that reads "Volatile natural gas prices increase energy costs..." Volatility alone does not increase energy prices.		X	Edit made

High volatility, or large swings in prices up or DOWN, increases the premium charge on options contracts, therefore you could say that volatility increases the risk management cost component of prices. What is trying to be communicated by adding volatility to the comment? I'd be happy to come up with some new text if you'd like. My biggest concern here is that price volatility has declined this year, even as energy prices stay high.			to put emphasis on high prices
Page 3 - top grey box			
- Think it would be good to add source for "potential to save 20-30% of res and com energy use" as well, unless that is widely accepted EPA number.	X		Source added
CHAPTER 1: INTRODUCTION (continued) **EPA LEAD: Steve Dunn**	**Minor (M)**	**Discuss (D)**	**Notes**
- the 30-40% reduction in peak Mass. power prices seems really high. The greatest price effect of ISO-NE DR programs in 2004 was only a 1% reduction in real-time prices. I'll need to look into this NEEP report methodology.		X	Stacy checked cite; # is correct.
Page 3 - text			
- Think we should add security here as well.	X		Added
Page 8 - Table 1.3	X		removed
"Funding and Incentives" row under "Funding and Incentives" columns is confusing.		-	
See Sedano pdf edits:			
Page 2, Environmental Challenges			
paragraph 1, first sentence – and health	X		Added
paragraph 1, second sentence - In how many states?	X		Added map
Page 2, Energy Challenges			
Regarding the second bullet - Transmission systems are over-burdened in some places, limiting the flow of economic generation, and in some cases, shrinking reliability margins to inappropriately small levels.	X		Edit made

Page 2, grey box, What is Clean Energy			
Paragraph 1 - Clean Energy without the proviso of output basis could confuse readers concerned that some of these sources could actually be Not clean		X	Not applicable to ee/re; addressed in output base section
Page 3			
Regarding benefit bullet at end of page - reliability should include explicitly energy security benefits	X		Edit made
Page 4, Energy Efficiency			
Paragraph 2, first sentence - At a life cycle cost of...		X	Costs updated
Page 6, Combined Heat and Power (CHP)			
Paragraph 3, last sentence - CHP in new construction	X		Not changed per KP
Page 8, Table 1.3: Codes and Standards - Use EE savings to pay for RE incremental cost		X	No edit
Page 9, Table 1.3 Summary of Clean Energy Policies by Policy Mechanism,			
Output-Based Environmental Regulations - Use EE savings to limit rate effect of renewables		X	No edit
CHAPTER 1: INTRODUCTION (continued) **EPA LEAD: Steve Dunn**	**Minor (M)**	**Discuss (D)**	**Notes**
Page 13			
End of References - Seems like a RAP document or several would be appropriate here.	X		Cited later in ch.

			6
1. p. 1 – could add other initiatives: energy efficiency initiatives in the public sector; pricing strategies to encourage greater energy efficiency. 2. p. 2 – HIGH and volatile natural gas prices…. 3. p. 3 – benefits of clean energy and energy savings potential boxes: could refer to SWEEP study for Nevada, as well as the EE Task Force report for the WGA—both provide info. economic, environmental, and water benefits. Also, could add a bullet on water savings benefits. Top of p. 5 is another place where the EE Task Force report for WGA could be mentioned. 4. p. 4. – Increased state economic development bullet – could note that energy efficiency leads to energy bill savings, with respending of these savings supporting more jobs than if energy were purchased instead, according to many studies including the SWEEP "New Mother Lode" study. 5. p. 5 – Cost of electricity from natural gas combined cycle power plants is no longer $0.05/kWh given today's natural gas prices. 6. p. 6 – CHP system efficiency can be lower than 75%, maybe as low as 60% depending on the application.			Edit made Edit made Added SWEEP study Edit made Updated Modified range

CHAPTER 2: DEVELOPING AN ACTION PLAN EPA LEAD: Denise Mulholland	Minor (M)	Discuss (D)	Notes
p. 1 you could mention NESCAUM in addition to WGA, just for regional variety (end of page)	X		n/a
p. 2 For the development of an energy plan, you might point out that leadership typically comes from one (or a combination) of a variety of sources, but is most often either the legislature or the governor. Also, clarify, again, that this is electricity system focused. New York, at various times (and others) have tried to integrate the DOT into the process, and you are focusing only on the electric sector (not a problem to do so, just be clear about what you're doing).	X		Modified text; also covered in 3.1 revisions
Also, when defining the public's role, I'd add that it's not just feedback, but new ideas or input to the state officials.	X		Modified
p. 3, the CT example is a repeat of the earlier statement.	**X**		Deleted
1. p. 3-4 – Again the energy efficiency potential study that SWEEP prepared for NV is a good reference on a thorough policy-based and quantitative state energy efficiency potential study; it includes a review of current energy efficiency policies and programs in the state. 2. p. 7-9 – I think there are some studies for California that are worth mentioning such as the "California's Secret Energy Surplus" study funded by the Energy Foundation and prepared by Xenergy; also are there any relevant CEC reports?			Used NV instead of CT Added report to list

CHAPTER 3: STATE OPPORTUNITIES EPA LEAD: Steve Dunn	Minor (M)	Discuss (D)	Notes
I found the heading for Section 3 confusing. Section 3 through 6 are all "state opportunities" for an action plan.	X		Done
The title of Chapter Three as it appears on the first page of the chapter is not the same as the one given in the Table of Contents.	X		Done
Section 3 "State Opportunities to Support Clean Energy". Being an EPA document, I was surprised at the general omission of biofuels as a source of clean energy and the lack of discussion toward incorporating alternative transportation fuels/technologies/strategies in any		X	Beyond the scope of report

comprehensive energy plan. We recognize that a large portion of our oil dependency is related to automotive uses, yet this area is noticeably absent from the Guide.			
There are some areas where aspects that I think are important are glossed over or omitted. An example is pages 26 – page 3 of 3.1 and 50 of Chapter 3, -- page 12 of 3.2 (SVD) where utility-funding for efficiency is ignored. And the risk management quality of efficiency, on page 69 in Chapter 3 -- page 6 of 3.3 (SVD). Also page 74 in Chapter through, addressing avoided T&D. ???	X		SG ? not sure about all sections/pages – can this be clarified – tried to include points where I thought they fit in -- DONE
I have also noted in the mark up some state or federal policy interactions that I think are important and are overlooked. Example: Chapter 3, page 29	X		SG - DONE
Sometimes, basic achievements are overlooked. Example Chapter 3 page 47	X		SG – Done
The explanation of dispatch on page 71 of Chapter 3 is misleading.		X	SG – don't cover dispatch – should be in section 3.4 (ART)
Thanks for mentioning CACPS. However, the software name is Clean Air and Climate Protection Software, not Clean Air Climate Protection Software.	X		SVD/SG — don't mention (SMG) – Changed in 3.4
See Sedano pdf edits:			
See Sedano pdf edits: Page 1, Table 3.1, State Opportunities to Support Clean Energy State Examples - and regional	X		SVD

3.1 State and Regional Energy Planning **EPA LEAD: Sue Gander**	**Minor (M)**	**Discuss (D)**	**Notes**
Section 3.1 page 13. The link for Kentucky's Comprehensive Energy Strategy should be changed. The link is to the governor's website which may not be as stable as our office. Suggested link, http://www.energy.ky.gov/energyplan/	X		Changed link SMG

Page 3.1.1 - think we could add security to 2nd paragraph (generally I think we should add the security bene as many places as we can, especially since it is a hot topic with both terrorism and natural disasters. Also an issue that state/local government are the first line of defense)	X		DONE (SMG)
Page 3.1.6 - Possible other participants for list - large end-users (industrials, public facilities, water utilities, etc), ESCOs, and munis/coops (unless those are considered part of your "utilities"	X		DONE (SMG)
Section 3.1: for states that have done energy planning, also mention KY and KS. KS hasn't done a huge or tremendously involved plan, but that might be part of the point. WI is the same -- ie. states can do a very involved effort, or not. Mentioned but not heralded as best practice per se	X		KY, KS and WI mentioned SMG
Can you clarify the differences between this plan and the Clean Energy plan you discuss in Ch. 2? These seem to overlap, or at least more clarity is needed to distinguish. KY's is not to heavy on renewables at all, so I don't know how helpful it is to what you're trying to accomplish. But it's worth looking at. Not sure about KY point	X		DONE (SMG)
As far as who develops the plans, it's sometimes the energy office, but it's also (particularly in states without much of an energy office) a task force. KY and KS did it this way.	X		DONE (SMG)
One of the issues that we've come across with energy plans is that they look pretty, often printed on glossy paper, but don't have much effect. I'd put a section in your report about how to tie them to other policies. NY for instance (you should verify this since it's from memory) requires that requests to build new generation infrastructure must be compatible with the energy plan. The plan can also bind agencies to do certain things -- conduct studies, procure certain resources. This is a very important element of an energy plan and making it really matter.	X	*See if this is enough	DONE - SMG
3.1 State and Regional Energy Planning (continued) **EPA LEAD: Sue Gander**	**Minor (M)**	**Discuss (D)**	**Notes**
certain resources. This is a very important element of an energy plan and making it really matter.			
In talking about OMS, you might make it clear that isn't at all a clean energy planning process (it could be, but it is	X		DONE (SMG)

not). Other states are looking to do the same thing – in PJM for example.			
p. 5 of same section add to your list of agencies involved the Education departments (because of University facilities – I've always been struck by that, and it's pretty common). This is in addition to their advisory role that they may play.	X		DONE (SMG)
Funding for the plans themselves is hard to tie down – you focus on the funding for the programs that the plans ask for. What we've found is almost no constant funding for planning, but in kind contributions of staff. KS or Wi, at one point, put in $100,000 toward a planning process, if I recall.	X		DONE (SMG)
States that receive SEP money are actually required to have some kind of energy plan in place. The plans are uneven, but it's worth mentioning.	X		DONE (SMG)
We've (NCSL) done a few talks on this topic, trying to help states to look at energy plans – South Dakota and Utah in particular. I'll ask someone to send you a copy of our power point – look for it from Alise Garcia of NCSL.	X		N/A (got it) SMG
Sedano edits – see pdfs			
Page 3.1.12 New England Governor's Conference (NEGC)			
Paragraph 2, Check on rocky state of NEGC. May need to figure out how to express w/o sounding oblivious or disrespectful	X		N/A SMG

3.1 State and Regional Energy Planning (continued) EPA LEAD: Sue Gander	Minor (M)	Discuss (D)	Notes
p. 4 – I think it is worth mentioning the WGA CDEAC process under regional planning.			Done - SMG
p. 8 – creating a collaborative and advisory group are really different things. I suggest this first bullet be changed to "Create an advisory group" as this is more typical than truly creating a collaborative planning process.			N/A SMG DONE (SMG)
p. 9 – A minor comment: not all utilities are regulated entities. There are also unregulated municipal utilities, federal power marketing agencies, and rural electric cooperatives.			Done
p. 12 – another minor comment: it is always helpful to define an "average MW" in reference to the NW Power and Conservation plan.			

3.2 Funding and Incentives EPA LEAD: Steve Dunn	Minor (M)	Discuss (D)	Notes
3.2, Page 11: No mention of the considerable new federal <u>investment</u> credits for energy efficiency and renewable e energy.	**X**		**Info added**
NOx Set-aside program for EE/RE – chapter 3, section 3.2, pages 6 and 7: states also have an opportunity under the Clean Air Interstate Rule to set aside NOx allowances for EE/RE and to allocate NOx allowances in a way that rewards renewable energy and efficient generators. STAPPA/ALAPCO will soon release a document outlining different options for doing this. Add placeholder? [URL: http://www.4cleanair.org/Bluestein-cairallocation-final.pdf]		X	This approach has not yet been approved, but we'll mention the set-aside option under CAIR
– A most obvious omission: utility cost of service. This is not the same as PBF because a PBF is a designated fund for a		X	Bullet added; Ace3 to

designated purpose, while utility cost of service means the funding is part of the utility responsibility to deliver least cost reliable service			review edited text
3.2 Funding and Incentives **EPA LEAD: Steve Dunn**	**Minor (M)**	**Discuss (D)**	**Notes**
p. 2 – The Texas LoanSTar program provides loans for energy efficiency projects in. …. And it is based on a one-time capital investment of $98 million, not "$95 million annually." p. 3-4 – I think it worth adding a box on the Oregon EE tax credits since they are so significant in terms of scope and value. p. 12 – Are there really examples of PUCs that administer grant or incentive programs? This seems inappropriate for a regulatory agency. p. 13 – In fact I think there are relatively few examples of good evaluation of state incentive programs, and I think this is weakness of this type of state policy. You might emphasize the importance of thorough evaluation, including accounting for "free riders" and net energy savings impacts. p. 15. The Colorado example on p. 15 is not example of state funding or incentives. This program facilitates ESCO projects and performance contracting in the public sector—there is no state funding or financial incentive involved. I suggest it belongs in the section on "leading by example." Also, what is the source for Table 3.2.1? p. 15 – Oregon also has individual tax credits for things like purchase of ENERGY STAR appliances and home retrofits. I think this long-standing and substantial incentives program also should be covered, along with Oregon's business tax credits. p. 17- Regarding the new incentives adopted by Washington, are the multipliers in Table 3.2.2 multiplied by the base incentive amount ($0.15/kWh)? Also is the incentive cap per project $2,000 or $25,000? And do all utilities in Washington pay the incentives, both non-for-profit and for profit utilities (there are many of the former)? This isn't totally clear from the text. p. 19 – The action steps for states seem to be buried at the end of the section. Consider moving them up before the state examples.			Corrected OR is covered in state examples Deleted PUCs Added free riders and net savings impacts Edit made. Added info. about RETC Clarified in text – At end for consistency across sections

3.2 Funding and Incentives **EPA LEAD: Steve Dunn**	**Minor (M)**	**Discuss (D)**	**Notes**
Page 3.2.9 Timing and Duration			
End of paragraph 2 - It's also important to reduce and finally eliminate an incentive if it becomes standard practice.	X		Added
Page 3.2.11 Interaction with State Policies			
Regarding fifth bullet, Renewable Portfolio Standards (RPS) - It seems that this could use an added sentence: States can also add efficiency to the RPS, as in Pennsylvania, or create a separate efficiency performance standard, as in Connecticut.	X		Added
Page 3.2.20 Tax Incentives			
URL Address for Tax Credits for Energy Efficiency and Green Buildings: Opportunities for State Action - this should be available on the ACEEE website for free download	X		added

3.3 Lead By Example **EPA LEAD: Steve Dunn**	**Minor X(M)**	**Discuss (D)**	**Notes**
p. 1 – The examples at the very end of p. 1 are not totally clear or accurate. I don't think state energy use totals 5% of all energy use in non-residential buildings. This may be the case for all public buildings, i.e., state and local buildings and schools (K-12 and higher ed.), but not for state buildings alone. Also, what is the size of the state (population) that would achieve the cited amount of savings from retrofits of public buildings? And is this the savings from retrofitting state buildings alone, or all public buildings (my guess is the latter). Also, it might be more useful to provide the typical savings potential per million residents, rather than for an "average" state.			Deleted.
p. 8 – Given the discussion of supportive EPA and DOE programs, doesn't the Rebuild America program deserve to be included? I believe the program is facilitating public building retrofits in at least some states.			Program has ended.
p. 15 – New York's green building tax credit does not benefit owners of public buildings since these entities do not pay taxes, right? This is not true in the case of the Oregon tax credits due to the pass through option, as is explained in the text.			Deleted

p. 18 – Under Texas, I believe the monitoring and commissioning work done by the folks at Texas A&M Univ. (Jeff Haberl, Dave Claridge, etc.) has been a key part of the efforts to improve energy efficiency in public buildings in TX over the years. p. 19. – Regarding the performance targets for existing buildings, don't you mean a 20% reduction in current energy use per square foot of floor area? And the time frame for achieving this target is usually longer than five years, more like 10-15 years (e.g., CA or AZ). p. 19 – Under action steps for states and local governments, I would add "ensuring that agencies can use and are using ESCOs and performance contracting to implement energy savings projects in their facilities, if internal sources of project financing are lacking." And again I think the Colorado performance contracting example belongs in this chapter, not in the one on incentives.			Added Text changed. Added; CO moved to here

3.3 Lead By Example **EPA LEAD: Steve Dunn**	**Minor (M)**	**Discuss (D)**	**Notes**
Sedano edits – see pdfs Page 3.3.3 Regarding third bullet, Innovative Financing - A key accomplishment is getting a myriad of state agencies operating in a common and sustainable direction.	X		*added*
Page 3.3.6 Regarding second bullet, Public Benefits Funds (PBFs) - Same comment as before -- add cost of service		X	Addressed in funding section
p. 1 – The examples at the very end of p. 1 are not totally clear or accurate. I don't think state energy use totals 5% of all energy use in non-residential buildings. This may be the case for all public buildings, i.e., state and local buildings and schools (K-12 and higher ed.), but not for state buildings alone. Also, what is the size of the state (population) that would achieve the cited amount of savings from retrofits of public buildings? And is this the savings from retrofitting state buildings alone, or all public buildings (my guess is the latter). Also, it might be more useful to provide the typical savings potential per million residents, rather than for an "average" state. p. 8 – Given the discussion of supportive EPA and DOE programs, doesn't the Rebuild America program deserve to be included? I believe the program is facilitating public building retrofits in at least some states.			Deleted. Program has ended.

p. 15 – New York's green building tax credit does not benefit owners of public buildings since these entities do not pay taxes, right? This is not true in the case of the Oregon tax credits due to the pass through option, as is explained in the text. p. 18 – Under Texas, I believe the monitoring and commissioning work done by the folks at Texas A&M Univ. (Jeff Haberl, Dave Claridge, etc.) has been a key part of the efforts to improve energy efficiency in public buildings in TX over the years. p. 19. – Regarding the performance targets for existing buildings, don't you mean a 20% reduction in current energy use per square foot of floor area? And the time frame for achieving this target is usually longer than five years, more like 10-15 years (e.g., CA or AZ). p. 19 – Under action steps for states and local governments, I would add "ensuring that agencies can use and are using ESCOs and performance contracting to implement energy savings projects in their facilities, if internal sources of project financing are lacking." And again I think the Colorado performance contracting example belongs in this chapter, not in the one on incentives.			Deleted Added Text changed. Added; CO moved to here

3.4 Determining the Env Benefits of Clean Energy **EPA LEAD: Art Diem**	**Minor (M)**	**Discuss (D)**	**Notes**
Page 3.4.3 - Has the word "expert" instead of "export" (second to last paragraph)	X		Done
Page 3.4.3 - May be helpful to include text on the role of demand in this dispatch(?). Could also use that to highlight how EE tech each have their own load curve, many that help reduce dispatching of higher prices resources during peak demand period.	X		Done
Description of CACPS in section 3.4, tools box – please change to: Clean Air and Climate Protection Software (CACPS). The State and Territorial Air Pollution Program Administrators and the Association of Local Air Pollution Control Officials (STAPPA/ALAPCO) have developed a software tool designed for use in creating emission reduction plans targeting greenhouse gas emissions and traditional (criteria) air pollutants.	X		Done
Sedano edits (see pdfs)			
Page 3.4.1 Benefits			
There is also the prospect of managing risk of future added environmental regulation.		X	Some what addres -sed

Page 3.4.3 Box on this page, How is Electricity Dispatched?			
Paragraph 3, middle of paragraph - Actually, in bid-based markets, cost is only related to the dispatch order -- it does not define the dispatch order. Generation owners get to decide how to bid their units to maximize profits, constrained only by prohibited efforts to manipulate the market by creating an artificial scarcity by withholding some generation, thereby causing prices to rise and benefit generation that can take advantage of this brief market opportunity.		X	Done
3.4 Determining the Env Benefits of Clean Energy **EPA LEAD: Art Diem**	**Minor (M)**	**Discuss (D)**	**Notes**
Page 3.4.6			
Paragraph 1, middle of paragraph - can also avoid the need for new transmission to deliver additional power from	X		Done
p. 4 – There is a statement that the New England Power Pool publishes annual reports on marginal emissions rates. This seems like it would be very helpful to utilities (or others) interested in estimating emissions reductions from EE/RE efforts. Do other power pools do this? If not, I suggest recommending that they do as a way to facilitate this general approach to encouraging EE/RE efforts.			**Done**

CHAPTER 4: ENERGY EFFICIENCY ACTIONS **EPA LEAD: Steve Dunn**	**Minor (M)**	**Discuss (D)**	**Notes**
There are some areas where aspects that I think are important are glossed over or omitted. … The passage about jurisdiction on page 7 of Chapter 4 is too breezy. Also, the purpose of tradable EEPS on page 9, chapter 4 needs the final connection.	X		SG - - Done
The one-third comparison on page 19 in Chapter 4 needs attention. Some purposes for PBF are missing, also page 19 in chapter 4. I also have a clarification on page 21 of Chapter 4.	X		SG
I offer a suggestion concerning the relationship between EEPS and existing EE programs on page 7 of Chapter 4. I have a suggestion on page 21 in chapter 4. More should be said about cost benefit tests on page 23 of Chapter 4. I also have some suggestions on independent EE administration on page 26 of Chapter 4. I have a suggestions on the EE funding discussion on page 29 on chapter 4. I have a suggestion on the connection between codes and standards and consumer funded EE programs on pages 38, 54.	X		SG

4.1 EE Portfolio Standards **EPA LEAD: Sue Gander**	**Minor (M)**	**Discuss (D)**	**Notes**
Sedano comments – see pdf			
Page 4.1.5 Setting a target			
Middle of paragraph – For a state that already does energy efficiency, there is a question about what to do about existing required levels of EE – should they count in EEPS, or should EEPS be incremental.	X		DONE - SMG
Page 4.1.5 Coverage			
Paragraph 1 – Jurisdiction stated too broadly. I would say that jurisdiction over munis and co-ops is limited or absent in a majority of states. There are also many states with this authority.	X		Done-SMG
Page 4.1.7 Interaction with Federal Policies			
To the extent that EEPS produces verifiable capacity savings, it can have favorable reliability and resource adequacy implications reflected in federally jurisdictional wholesale markets overseen by FERC, NERC and the regional reliability organizations, RTOs and transmission owning companies.	X		DONE - SMG
Page 4.1.7 Program Implementation and Evaluation			
Paragraph 2 – Why? Because EEPS credits will be tradable in a market place and have to have meaning. Ought to finish the thought.	**X**		DONE -SMG
4.1 EE Portfolio Standards **EPA LEAD: Sue Gander**	**Minor (M)**	**Discuss (D)**	**Notes**
p. 1 – You might define the term “MMtherms” or just use “million therms”. p. 5 – In specifying an energy savings target under an EEPS, I think it should be stated that specific quantitative savings goals (the CA approach) are more certain and less ambiguous than the approach of saving a percentage of load growth (the TX approach) since actual load growth and hence the savings targets are not known in advance with the latter. p. 11- Is the Illinois standard in place and is it mandatory or voluntary? I believe earlier in the chapter it was mentioned as being voluntary. If so what does this mean? How likely is it that the utilities in IL will ramp up efficiency programs and meet or come close to meeting the target if it is voluntary?			**DONE – SMG** **Done-SMG** **Done-clarified – no judgement on outco**

p. 9-11 – I suggest including the Nevada example as well. This policy which adds energy savings to the renewable portfolio standard is in place, and the utilities are taking it seriously. They have already announced a major increase in EE program funding for 2006, and the PUC has opened a docket to define the detailed rules on how the new portfolio standards will work.			**me – SMG** **Done**

4.2 PBF for EE **EPA** **LEAD: Sue Gander**	**Minor (M)**	**Discuss (D)**	**Notes**
Table 4.2.1 has a typo in subtitle – and in the first column, bottom row – also please add $ where appropriate	X		Done - SMG
Sedano comments – see pdfs Page 4.2.1 Summary End of paragraph 3 - The compared funding levels are nominal. If one looks at real dollars, or examines percent of total revenue, the result is that nearly everywhere, EE funding is well below levels of the early 1990s.	X	X- check with ACEEE	Done – see insert 1 - SMG
End of paragraph 4 - Watch out for this. One-third the cost means that the generation being compared is 9 cents/kWh. Is that really what is meant? The alternative meaning is that the compared generation is 4.5 cents/kWh and EE is one-third less. Please check primary source and get phrasing right.	X	Review	Done- see insert 2- SMG
Page 4.2.1 Objective			
Page 4.2.1 Objective Other purposes too, including support for low income consumers and consumer education.	X		Done- SMG
Page 4.2.3 Funding Regarding …first bullet, Mechanism, two 2 comments –			
First comment - I don't think it is clear enough that utilities can do EE based on resource investment rules supervised by the PUC and paid for out of its general revenues without the need to set up a special funding stream through a PBF.***NEED SOME FOLLOW UP BY STRATUS	X	Review!!!	Done – insert #3 - smg
Second comment - I will be looking for a discussion of the use of a PBF as a floor for EE funding, as opposed to the ceiling which is often the reality. Note the legislatures often cap EE funding regardless of EE value. This practice artificially limits the value of EE to consumers.	X		Done – see comment below- SMG
Page 4.2.4 Regarding first bullet, Vermont - This should have a legislative cite in the references – added one to the list	X		Done- smg
Page 4.2.5 Determining Cost Effectiveness			
Paragraph 2 - Without seeing the box, there must be more here. On the more inclusive side, something must be said about the	X	Need KH	Done - SMG

societal test, applicable for states that want to consider non-electric implications for energy use and energy savings. Rhode Island, for example, includes water savings in its EE cost-effectiveness test. On the less inclusive side, the ratepayer impact measure test (RIM test) looks only at the effect on ratepayers participating in the EE programs, and excludes from the cost effectiveness assessment system benefits from EE such as reduced need for generation capacity, transmission lines, and energy production. See attached text rewrite		review and coordinate with Stacy for sec.tion 6	
4.2 PBF for EE **EPA LEAD: Sue Gander**	**Minor (M)**	**Discuss (D)**	**Notes**
Page 4.2.7 Utility Policies			
Paragraph 3, second sentence - Here is a good place to make the "ceiling/floor" distinction clear.NEED reference for VT legislation	X		Done-see insert #4SMG
Page 4.2.8			
Regarding third bullet on top of page - Non-profit was not a criterion in Vermont, it was the outcome of a competitive process that included for profit bidders. Oregon was set up as a non-profit and was not competitive.	X		Done- smg
Page 4.2.8 Grey box, Best Practices: Implementing PBF Programs			
First comment - I would add: Maintain functional database that records customer participation over time and allows for reporting on geographic and customer class results. I am thinking about the excellent database of Efficiency Vermont. Put under evaluation -- ** See also insert for additional text.	X	Would like KH to review	Done-smg
Second comment - Related the adjacent comment: be sure that utility customer information is available to aid the administrator in dealing with customers. Again, Vermont is a positive example. New York did not work out a deal for the administrator to have access to customer information and this hinders NY in serving customers.	X		Done-smg
Page 4.2.9 State Examples California			
Last paragraph, second sentence – This glosses over some of the confusion and uneven quality produced by the decision to allow so many different implementers in CA.	X	Review – Steve Dunn? And then KH?	Done-SMG
Page 4.2.11 Action Steps for States			
Regarding second bullet, Determine Program Funding Needed to Capture Cost-Effective Energy Efficiency	X		N/A

First comment – This paper does not address the bias of funding energy efficiency as compared with funding reliability investments. Where EE can be a reliability tool, this leaves EE under-funded to capture cost-effective resources.	X		Done-smg
4.2 PBF for EE (continued) **EPA LEAD: Sue Gander**	**Minor (M)**	**Discuss (D)**	**Notes**
Second comment – This paper does not address the inherent conflict about expensing vs. amortizing EE. PUCs think about rate impacts when they consider "appropriate" funding levels for EE. When starting an EE program, expensing the cost of a reasonably sized program leads to significant rate effects (1-3%). If these costs were treated as other system investments, they would be amortized over the expected life of the investments (10-15 years for EE) and the rate effects would be much smaller. This regulatory choice can have a significant effect on how much EE is actually delivered. This point belongs earlier – suggest under funding on page 3	X	Asking ACEEE to review/ input- then KH review	Done- see insert 5 - smg
Page 4.2.13 Examples of Legislation			
I think you should have Vermont's law here. Unfortunately, the relevant law is actually the sum of several sections from title 30 and defies a single link.	X		Done
First of all I think this section is too narrow in its scope and title. The broader strategy is ratepayer funded energy efficiency programs, and a public benefits fund (PBF) is one mechanism to carry out this strategy. Some states such as Minnesota and Utah have well-funded utility energy efficiency programs but use other approaches such as a tariff rider or inclusion of efficiency program costs in rates to fund the programs. California now has a hybrid approach with the state's PBF providing only a portion of the total budget for utility energy efficiency programs. Most PBFs were enacted in conjunction with utility restructuring, which is more or less a dead issue these days at least at the state level. And some states such as CT and WI have experienced "raids" on PBFs in recent years. I suggest renaming this section "Ratepayer Funded Energy Efficiency Programs" and covering but not limiting the discussion to PBFs. p. 1 – Please check the numbers at the top of the 2nd column. 1.3 million MWh/yr of electricity savings sounds low based on a DSM budget of $540 million. I would expect savings of at least 2 million MWh/yr. Are you sure that all savings resulting from these programs are included?		review	Done – insert 3 – SMG Double checked data

p. 8 – The first bullet listing states where utilities implement PBFs mistakenly includes NV and TX (states with utility efficiency programs, but no actual PBF as far as I know), and AZ which has a PBF but the money in recent years has gone to renewables not EE programs. I would drop these states and add CA and CT to this list. Also, I don't know if it makes sense to list the hybrid category. There is always state oversight of investor-owned utility EE (and other) programs, whether by the PUC or some other state entity. p. 9 – You might mention the recently approved budgets for utility energy efficiency programs in CA during 2006-2008 (both PBF and procurement)-the numbers are impressive!			Talked to ACEEE on this – how to approach the small/not so small distinctions See insert 6

4.3 Building Codes for EE **EPA LEAD: Niko Dietsch**	**Minor (M)**	**Discuss (D)**	**Notes**
Figure 4.3.1. Effective August 27, 2005, Kentucky will adopt the EICC 2003 Commercial Energy Building Code.	X		X
Sedano comments – see pdfs			
Page 4.3.6 Interaction with State Policies – Paragraph 1 – A point that I think is important is that the more stringent codes and standards are, the less pressure is on PBF and utility-funded EE programs to address these inefficient end uses, allowing more funds to go to achieving still higher EE performance.	X		Did not address. Code stringency and funding requirements are unrelated, says D. Weitz.
Page 4.3.7 Program Implementation and Evaluation – Regarding the last bullet – Many states take the attitude that "self-enforcement" is the only effective approach. They observe that inspections are very costly, and that if builders and owners are obligated to follow codes and do not, they are exposed to legal consequences, and this risk promotes adherence to the code.		X	X (elaborated on self-enforcement part but left out legal consequences discussion)
4.3 Building Codes for EE **EPA LEAD: Niko Dietsch**	**Minor (M)**	**Discuss (D)**	**Notes**
p. 1 – Again, it might be most useful to provide typical energy and $ savings per million residents, rather than for an "average" state.			X

p. 7 – The problem of not enough funding for building inspections and code enforcement really is a big problem in the southwest states. If possible, add some concrete examples of states or utilities providing supplemental funding to local governments for inspections and code enforcement. p. 10 – There is a typo at the bottom of the first column: Phoenix adopted the 2004 version of the IECC, not the 2000 version. p. 11 – Under action steps, I suggest adding another bullet on properly enforcing codes which means ensuring local building code departments have proper training and resources (i.e., enough staff). My impression is that this often neglected, but I think there are examples of states that do a good job on enforcement; e.g., Massachusetts is a state with very high code compliance, and that there was 2002 ACEEE Summer Study paper on this by Mark Halverson, et al.			Data unavailable. X X (included additional text on importance of enforcement)

4.4. State Appliance Efficiency Stds **EPA LEAD: Andrea Denny**	**Minor (M)**	**Discuss (D)**	**Notes**
Page 4.4.6 Interaction with State Policies - So standards take pressure off of PBF or utility-funded EE to achieve savings by replacing inefficient appliances that should not be on the market anyway.	X		Done
Update state lists & Energy Bill Implications	X		Done
p. 1 – There are nine states that have adopted state appliance efficiency standards in recent years; the list is missing Oregon. Also, I would update the overview and explain that the 2005 federal energy bill included national standards on 15 products (many are included in Table 4.4.1, most of which were already included in the state standards (i.e., the state standards paved the way for federal standards). However, this means there is less savings potential from and need for new state standards. p. 3 – In the 2nd column, are these really the potential impacts from proposed standards in Washington, or does this refer to the standards adopted there this year? I suspect the latter. p. 4 – Add Oregon to Table 4.4.2. Also, this table could note which products were included in the 2005 federal energy bill. In practical terms, California takes the lead on new state efficiency standards—CA has the resources and experience to analyze new standards and fight/negotiate with equipment standards, as well as the political will to move ahead and set standards in the face of opposition if justified, and then enforce the standards. Then other states copy standards that California has set, and in some cases			All Done

rely on California for enforcement as well. This is the practical reality of what is occurring, and it I think states should understand this; i.e., the text should diplomatically reflect this reality.			

CHAPTER 5 COMMENTS **EPA LEAD: Katrina Pielli**	**Action taken**
A.) Check footnote for Figure 5.1.4. B.) Use of "power pool" at page 7 of Chapter 5 ignores that some places don't function with power pools. C.) At page 8 of Chapter 5, note that CT will have a three tier RPS now with its new law. D.)Clarify at page 11 of Chapter 5 that it is not just the utility subject to an RPS but the competitive retail supplier or default service provider, which may not be the utility. E.) The link to NEDRI on page 27 of chapter 5 is not correct – it goes to a single NEDRI report that is not really related to the topic, rather than to a site with more appropriate content. F.) Another barrier to OBR is the difficulty of applying this to existing units (page 33 of chapter 5). By the way, this acronym is not commonly used, as others in the report are – I would reuse the full phrase from time to time. G.) Fix legend shading in figure 5.4.1. – stripped and light-blue interconnect figure H.) At page 61 of chapter 5, I don't think the danger of using existing resources and applying them to green products is sufficiently discussed.	A) revised footnote B)Changed "power pools" to RTOs or regional power markets C) used "multiple-tier" rather than "two-tier" D) added the term "retail supplier", where appropriate in various places E) NEDRI link corrected. G) The legend and shading in the word document was compromised by the PDF conversion. We have changed the blue stripes to light blue to prevent further conversion errors. H.) Ignore – this is for the Green Power doc
I am not sure the concern about encouraging more long term contracts is clear enough at Chapter 5 page 6. The discussion about existing renewables vs. new lacks an explanation at Chapter 5 page 7. Ought to say at page 8 of Chapter 5 that ACP are usually used for renewable deployment funds. I think the administration of a clean energy fund needs to include a periodic review to see to it that the funds are being used for sound purposes (see page 21 of Chapter 5 for comment). I suggest at page 34-35 of chapter 5 including the value of energy and environment officials communicating on their priorities. I suggest listing the MADRI website at page 51 of Chapter 5. The National Council work on disclosure could be cited at page 67 of chapter 5.	Acknowledged and addressed
Table 5.1 NJ in first and fourth lines (RPS and Interconnection) as a state example?	Included NJ as example for IC, not for RPS as we already have 5 RPS examples.

Sedano comments – see pdfs	Acknowledged and addressed

CHAPTER 5 COMMENTS **EPA LEAD: Katrina Pielli**	**Action Taken**
Sedano comments – see pdfs	
P.1 Last bullet on page, first sentence – I wish we could eliminate "level playing field" from the lexicon. More direct phrase is "remove bias" or "resource neutral effect" conveys it more directly, though with less color.	None. KH has specifically included this phrase.

5.1 RPS	**Action Taken**
Section 5.1, on Renewable Portfolio Standards, does not include Delaware among states that have adopted an RPS. Delaware passed Senate Bill 74 on July 21. SB 74 requires electricity providers to obtain 10% of their electricity from renewable energy resources by 2019. Solar, wind, ocean, fuel cells powered by renewable fuels, hydroelectric facilities with a maximum capacity of 30 megawatts, sustainable biomass, anaerobic digestion, and landfill gas (if stated environmental criteria are met) are qualified sources to fulfill the standard's requirement. The bill also encourages distributed generation: solar power and fuel cells using renewable fuels receive a 300% credit toward compliance. Wind turbines operating in Delaware receive a 150% credit.	Added DE on Figures 5.1.2, 5.1.3, 5.1.4 Updated charts with recent Navigant Consulting Inc. study.
CEC and Katofsky and Frantzis References	Removed the CEC reference as the other two sources are sufficient to cover the referenced material. Also made consistent Navigant Consulting source throughout documents with reference to power eng article
5.1, Page 6: Some ACP payments are considerably higher than 5 cents / kWh (e.g. PA 2x solar REC market pricing,) and recoverability from ratepayers is not as widespread as this sentence would tend to indicate.	Mentioned higher ACP for some solar set-asides
As far as cost recovery for the RPS goes, mention that the SBC can be used to help in cost recovery for utilities to meet the RPS requirement.	Added comment about SBC funds

5.1 RPS	**Action Taken**
Sedano comments – see pdfs Page 5.1.2Benefits - Might want to acknowledge that some of these benefits are transfer payments from other energy producers, including foreign and domestic, but that some also are societal benefits, especially if environmental values are fully considered.	No change
End of page discussion about operational benefits, first bullet - Modest cost if RPS level is set at an achievable level. If level is too high, cost can get more than modest.	Modified wording to address comment.
Page 5.1.3 States with RPS Requirements	
Paragraph 2, first sentence - Requirements are always changing	
Paragraph 2, third sentence - Why? Apparently to address risk management concerns pertaining to natural gas, coal and climate change concerns.	Modified wording to address comment
Page 5.1.4	
Regarding first bullet, Renewable Electricity Generators - Why not be clear about long term contracts?	Change made
Figure 5.1.4, footnote - This footnote seems to be inconsistent on non-renewable fuel cells.	Made wording change. These state **do** allow non-renewable fuel cells
Figure 5.1.5 - These are dangerous data to be used this way, since their provenance is probably quite varied.	Data have been cited in NREL, LBNL presentations and seem reasonable. They are good indications of modest bill impacts. No change.
Page 5.1.5 Applicability and Eligibility	
Regarding second bullet, Existing versus New - Why is this important? States want to see this policy lead to change, not just reallocating the responsibility to pay for existing renewable resources, or to give existing renewable resources a windfall.	Added wording about why emphasis is on new renewables.
Third bullet, Geographic Zone - Pool, or regional market otherwise defined	Used “regional power market” in lieu of “power pool”
Last paragraph - Is it appropriate to note that PA acknowledges its broad-qualifying definition by calling their an alternative energy portfolio standard	Made wording change about expanded PA terminology
Page 5.1.6	
Regarding Second Bullet, Mandatory or Voluntary, end of third paragraph - change "2" to "multiple" to reflect that CT has 3 tiers now	Change made.
Regarding third bullet, Renewable Energy Mix, beginning of third paragraph, referring to credit multipliers - Should you have a reference to the typical object of these payments - a renewable fund tasked with renewable tech deployment?	No change necessary. Multipliers are not usually based on SBC fund activities

5.1 RPS	**Action Taken**
Page 5.1.8	
Regarding first bullet, Cost Caps, beginning of third paragraph - This refers to actual ACP, not the existence of this policy.	Made wording change.
Page 5.1.9 RPS Design Choices and Approaches	
Regarding second bullet, Centralized Procurement (New York), beginning of second sentence – or retail supplier	Made wording change.
Page 5.1.10 Grey box, Best Practices: Designing an RPS	
Regarding third bullet - Is there a need to point out that Commerce Clause makes a RPS a hard thing to limit qualifying resource to just the state.	Mentioned ICC on p. 5, as suggested.

5.2 PBF for State Clean energy programs	**Action taken**
Title for 5.2 seems excessive -- do we need to include "state" in this?	Un-edited per direction.
Figure 5.2.1 and related text -- would help clarify if the text notes that ME has a voluntary program (since it is in the table), and then note in the table that MT is not listed	Added Maine to text with voluntary note. Changed table to include MT. Reference 16 states instead of 15.
Source Citation: Katofsky and Frantzis 2005.	Made consistent Navigant Consulting source throughout documents with reference to power eng article
Source Citation: Hunter 2004	Refers to Scott Hunter under NJCEP. 2004 reference description.
SmartPower not in text	SmartPower is referenced on page 8 under heading “States that Do Not Have an Existing Clean Energy Fund”
Sedano comments – see pdfs	
Page 5.2.2 Benefits	
Regarding third bullet, Support Long -Term Goals - Why not be more direct and say that these funds are often dedicated to accelerate development and deployment of technologies already under development in the state by state firms?	Added suggested language to text.
Regarding fourth bullet, Complement Other Policies - Another opportunity for complementarity is with tax policy.	Unedited: Section appears to make reference to “tax policy” as written.

5.2 PBF for State Clean energy programs	**Action taken**
Page 5.2.3 Administration	
Not here is some mention of a review process that assures that the funds are being used for valuable public purposes. It is important to avoid any appearance or public perception that these funds are being wasted on deadend technology, undevelopable technology, or politically connected companies.	Added language in the first paragraph of the Administration section.
Page 5.2.9 On the Horizon	
Policy, Integrating PUC goals into PBF program design, New England Demand Response Initiative link - Is this the right link? This is the "Modeling Demand Response..." report, not the NEDRI final report, which is http://nedri. raabassociates.org/ or http://www.raponline.org/Feature.asp?select=20&Submit1=Submit	Updated Link.

5.3 Output-based Env regulations to Support Clean Energy	**Action Taken**
Sedano comments – see pdfs	
Page 5.3.5 Barriers to developing OBR	
Beginning of paragraph 1 - Applying to existing units can be very disruptive and can meet with much stronger objections.	Added sentences on pg 5 to address this.
Page 5.3.6 Evaluation	
Paragraph 1 - One issue that often comes up is that the environmental agencies lacks awareness (and sometimes interest) in energy issues. This is where energy officials can work with their environmental peers to develop a joint awareness of the value of output based regulations.	Added sentence on pg. 6 “It may be advantageous to engage state energy officials in this process to get additional perspective and insights into the energy implications of OBR.”
Page 5.3.7 What states can do	
First comment - I would return to the full use of OBR, output based regulation, at the beginning of the What States Can Do section.	Done.
Second comment - I would say again that getting energy and environment officials to work together is an important precursor to OBR.	Added sentence on pg 6.
Page 5.3.9	
- duplicate page -- are you still reading?	Removed “References” section.

5.4 Interconnection standards	**Action Taken**
The inclusion of net metering as a subpart of interconnection does not adequately reflect the importance or complexity of this state policy. This would be a critical flaw in the basic design and usefulness of this document.	None. May decide to break it out in subsequent versions of the GTA
• States without net metering have radically lower rates of DG and small renewables development than those with net metering.	Supporting data not currently available.
• Current state policies vary widely, and adoption of best practices is somewhat limited.	We have included several resources identified as useful and relevant. If there are any additional suggested resources we will integrate them into the document.
• While interconnection is primarily a technical issue, net metering is a financial one. Their frequent presentation as "interconnection and net metering" in policy and other documents reflects more than anything else their shared status as "threshold issues which must be resolved to see significant development of DG, rather than any functional equivalence or similarity.	None - see first comment.
• The considerations involved in development of net metering are at least as great as those associated with the other policies in this manual, and it absolutely deserves its own section in the analysis of clean power development.	None -see first comment.
• Consideration of net metering by the states has been explicitly required by the 2005 Energy Bill, and many will be seeking guidance on this issue specifically.	Added text describing how the Energy Bill addresses IC and NM.
Interconnection policies arguably deserve special treatment as a "threshold issue" – rather than just one of a menu of options - for development of clean energy.	None - see first comment.
• Consideration of simplified interconnection by the states has been explicitly required by the 2005 Energy Bill, and many will be seeking guidance on this issue specifically.	Added text describing how the Energy Bill addresses IC and NM.
• Clean energy is disproportionately distributed generation, and a workable interconnection regime is critical – not helpful, but determinative – to the development of distributed generation resources in any state.	Added text to address comment.

5.4 Interconnection standards	**Action Taken**
5.4 The New Jersey model is far and away the best and best-considered state model for interconnection of DG and deserves pride of place; NJ BPU staff would be very helpful in providing any necessary information.	Added NJ description as a state example
Figure 5.4.2 -- note that HI is not included in the table (although it is in the map)	Added HI to table
5.4 - The single largest problem with interconnection currently in the states is state by state inconsistency. This prevents the formation of a true national market for distributed generation equipment, and keeps equipment complexity and expense unnecessarily high. It cannot be overemphasized that state by state differences are the entire problem with interconnection currently, and that any process which begins with a clean slate has already taken several big steps towards failure.	Added the following: "Consider existing federal and state standards in the development process of new interconnection procedures and rely on accepted IEEE and UL standards to develop technical requirements for interconnection."
There is no push for each state to develop their own rules and standards for interconnecting phones to the telephone system, or computers to the Internet, despite the fact that in all cases the technical issues have been defined, settled, and certified by national and international standards-setting agencies.	No action required.
It is critical that this section heavily emphasize building from the existing NARUC / FERC models, or those in New Jersey. This is more than a "worthy goal" to be mentioned at the bottom of a bulleted list of other goals, it should be the defining paradigm and main thrust of the section.	Added sentence to the 3rd bullet from the bottom: "Also, consistency within a region increases the effectiveness of these standards
Section 5.4 "Interaction with Federal Policies". This section would be strengthened by discussing the implications of the Energy Policy Act of 2005, Section 1251 in regards to net metering and PURPA. If state-level net metering programs will be voided by the federal rules, much of the discussion in this section will be moot or the federal impact clarified. There is also opportunity to better link this document with the 2002 Farm Bill and the pending 2007 Farm Bill.	Added text on IC and NM addressing 2005 EPAct. The 2002 Farm Bill does not explicitly address interconnection.
Page 5.4.13 - References - MADRI?	Added url for MADRI.
Sedano comments – see pdfs	*Acknowledged and Addressed*
Page 5.4.2 - Figure 5.4.1 - get legend color to match	The legend and shading in the word document was compromised by the PDF conversion. We have changed the legend and shading to prevent further conversion errors.

5.5 Fostering Green Power	**Notes**
Overall, I think that the "Fostering Green Power Markets" chapter is informative and well-written. In particular, I think that the state examples are very valuable.	**All comments have been incorporated or addressed**
Here are some general and specific comments:	
General Comments on 5.1 (5?)	
It seems to me that the organization could be improved by adding a couple of sections that might assimilate some information from the other sections.	
The first ("Important Product Attributes?") would describe the key attributes of a green power product, perhaps incorporating some of the "design issues" bullets on page 8 but also including the fixed-rate pricing notion.	
5.5 Fostering Green Power	
The second ("State Oversight of Green Power Programs?") would more clearly state the most important components for state oversight of green power programs, such as:	
• Product source	
• Product pricing	
• Certify that RE supply is adequate to meet GP sales, e.g., by requiring annual reporting	
• Level of marketing effort and expenditures	
• Supporting public awareness activities, campaigns or programs	
Perhaps these would be the first two sections under "Creating a Favorable State Framework for Green Power Markets."	
Summary 4th para, suggested edit: "In restructured markets, green power products are can be available from a range of competitive suppliers. Customers are may also increasingly be able to add renewable energy to their default service by so called "green check-off" programs.	
Objective - I think that it is important to point out that the central notion behind green power programs is to allow customers to	

support renewable energy development above and beyond the levels determined to be economic or prudent through the utility resource planning process or through state policies, such as RPS.	
Last para: I generally think of RPS and other policies as providing the "base" rather than green power markets. As just noted, voluntary green power sales should be additional to existing policy mandates.	
Benefits - First two bullets and Figure 5.5.1: We have updated our figures on the amount of renewable energy capacity being supported by voluntary green power demand. See: http://www.eere.energy.gov/greenpower/resources/tables/new_gp_cap.shtml (should already be posted or will be posted very soon)	
Status of Green Power: This section uses the term tradable renewable certificates (TRC) implying that this is the preferred term for renewable energy certificates (RECs). I think that RECs is used more widely than TRC and I would use it here. In fact, "REC" is used predominantly in the box write-up ("Types of Green Power Products") and as well as in the RPS section of the Guide (Section 5.1).	
Footnote #2: should add "or cooperatives" as in "Many are municipal utilities or cooperatives."	
Box ("Types of Green Power Products"): "TRC" acronym is introduced twice (in both the first and last paragraph) -- only need to do it once.	
Figure 5.5.2: States with Utility Green Pricing Programs - Updated map is available at: http://www.eere.energy.gov/greenpower/resources/maps/pricing_map.shtml	
Figure 5.5.3: States with Competitive Green Power Marketing - Updated map is available at: http://www.eere.energy.gov/greenpower/resources/maps/marketing_map.shtml	
Creating a Favorable State Framework for Green Power Markets	
Here and elsewhere, I think that use of the phrase "successful states" is not warranted; it's really too early to say that any states have been successful (or to know how you would define that).	
Establishing the Program - 1st para: would use the qualifier "some" state legislatures . . . have taken an active role . . .	
2nd para: again, would use the qualifier "some" states have taken a first step . . .	

5.5 Fostering Green Power	
I think it's important to be clear that in some states, e.g., PA and TX, the retail market has been reasonably competitive and thus green power suppliers have entered the market to compete for customers against suppliers of traditional electricity. It is primarily where retail competition has not developed that some states are requiring that the default utilities offer green power or provide a check-off program.	
Roles for Stakeholders: "Green-E" should be "Green-e" (lower case "e")	
Key Supporting Policies and Programs: I'm not sure that "requirements for utilities" is a "critical" policy; perhaps "can be an important" policy is a better way to phrase this. Yes, it is important for customers to have a green power option, but many of the most successful programs are those that were undertaken voluntarily and willingly by utilities.	
Other Supporting Policies and Programs : Under Large Customer Incentives, I wouldn't categorize fixed-rate pricing or fuel-price exemptions as "incentives" for participation, rather these are product attributes. You might also note here, something like: "The most successful program in the United States—the GreenChoice program offered by Austin Energy—provides customers with the fixed-price attribute of the utility's renewable power purchase contracts."	
Interaction with Federal Policies and Programs - I would place Federal Renewable Energy Incentives first in this section and note first that federal incentives, such as the production tax credit, help reduce the cost of renewables generation and thus the price premium that green power customers must pay.	
Massachusetts: The second paragraph should be broken into several smaller paragraphs.	
The reference to tradeable renewable certificates (TRC)s is confusing, especially given that on the next page it talks about RECs and TRCs. I thought that RECs was a more recognized term than TRCs. Although the difference is explained in the box on page 3, leaving out RECs is definitely confusing on p.2.	
Table 5.5.1: Green Pricing Programs (as of May 2005) - Should add "Offered in Washington State" to the title, i.e., "Green Pricing Programs Offered in Washington State."	

5.5 Fostering Green Power	
References - Here are some of the missing URLs:	
Asmus, 1998	
http://www.repp.org/repp_pubs/articles/issuebr9/index_ib9.html	
Bird and Cardinal, 2004	
http://www.eere.energy.gov/greenpower/pdfs/36833.pdf	
Holt and Holt, 2004	
http://www.awea.org/greenpower/greenPricingResourceGuide040726.pdf	
The chapter on green power looks great. Should be a big help to States.	
The only part I found confusing was on p. 2, under "Status of Green Power."	
The reference to tradeable renewable certificates (TRC)s is confusing, especially given that on the next page it talks about RECs and TRCs. I thought that RECs was a more recognized term than TRCs. Although the difference is explained in the box on page 3, leaving out RECs is definitely confusing on p.2.	
Page 5.5.9 Grey Box, Best practices: Designing and Implementing Green Power Programs	
Regarding fifth bullet - Why isn't "new" or "substantially retrofitted" a criterion here? Green power should not be about taking existing resources that all customers are paying for and reallocating them so that only a few are paying for them.	
Page 5.5.15 References	
National Council series on Disclosure?	

5.6 Emerging approaches: Utility Rates to Support Clean energy Supply	**Notes**
REFERENCES – The EIA Annual Energy Outlook does not count “non-marketed” energy, which excludes all behind the meter sources – it cannot therefore be used for any credible estimations of existing or installed renewable capacity.	**Text clarified**
REFERENCES - The REPP has since the publication of this document released updated and more specific versions of some of	

its jobs reports, which could be reflected in several areas.	

CHAPTER 6: UTILITY PLANNING AND INCENTIVE STRUCTURES **EPA LEADS: Tom Kerr & Stacy Angel**	**Minor (M)**	**Discuss (D)**	**Notes**	**Complete?**
Chapter needs to be rewritten to address non-state jurisdictional utilities, ie public power and coops. In some states, such as in Washington and Oregon, they are major parts of the electric system. And historically some of them are leaders in clean energy.		D	Added new section on non-jurisdictional	yes
Page 1, in the first sentences of para's 1 and 3, insert the word "Some" in front of "[s]tate public utility commissions and "In SOME states served by regulated,..." respectively. Same goes for page 2, second column. The first and third full paragraphs.	M		Added "some" to 6.1.1P1&3 and 6.1.2P5&7	yes
Overall the document is well organized. Printed in black and white, the headers of different levels are confusing – major headers appear in lighter font than lower level headers, which is counter-intuitive.	M		**Better addressed by SLCBB project leads**, no edits made	**No**
My general comment about the chapter is that I like it. I suppose that I'd offer a general word about IRP, which is that it's had limited effect in the past. I think it's actually having more effect now, in its reincarnated form. But it took a while to reach this stage, and it's still pretty uneven in the states that require it. It might useful to offer a bit of perspective on this in your "history/background" section.	M		Edited 6.1.2 p5&6 accordingly	yes
Paragraph 1, page. 1: seems a bit wordy, esp. for a a first paragraph. I think you can say that almost all say that utility profits decrease in almost every state. That decoupling is fairly rare in electricity; I'm having trouble thinking of the states that have decoupled at all and only can think of Maine. California? I think it's more common in gas -- I think it's a good idea for sure but be careful in presenting it as a currently common approach. The final sentence should end with what the two policies are...you're left hanging.....	M		Edited 6.0.1P1 used "most" states instead of many, made other edits to shorten & bring the two policies in.	yes

P. 2, not sure which "programs" are being referred to	M		Could not find problemativec "program" reference, no edits made	yes
CHAPTER 6: UTILITY PLANNING AND INCENTIVE STRUCTURES **EPA LEADS: Tom Kerr & Stacy Angel**	**Minor (M)**	**Discuss (D)**	**Notes**	**Complete?**
p. 3 refers to Table 6.1 listing examples of "these" policies but not sure what "these" refers to	M		Replaced "these" with portfolio mgt	yes
p. 1 I'd say "some" state public utility commissions..." since not all do	M		Done, as noted above	yes
p. 4 I'd do a general search on the word "deregulated" utilities and change it to restructured or another word. Deregulated goes too far.	M		Replaced some dereg references with restructured	yes
Page 3, paragraph under Benefits: you refer to the "electric load used to serve customers." substitute "generation" for "load".	M		Deleted load, edited it to read electricity required	yes
same paragraph: I'm puzzling over how diversification of resources reduces price risks from contract type. Maybe I'm oriented towards a different type of contract from what you're thinking of here...I'm thinking of term of contracts etc.	M		Deleted "or contract type" added contract type reference in first paragraph	Yes
Under Background - EE/re programs didn't really decline so much because IRP was rescinded and because customer choice would offer an optimal resource mix. It was more that the focus shifted to very short term investments like natural gas power plants. EE/RE didn't pass the very short term test, something IRP was supposed to have addressed in the old regulated system.	M		Made edits 6.1.2P5	yes
Under Integrated Resource Planning, 2nd para. there's a "The" that should be a "They"	M		Made edit 6.1.2P9	yes
Under Retail Choice Portfolio Mgt. I view standard offer service and default service as fairly synonymous and wouldn't really make the distinction here. Only MA defines them differently as far as I know. The graph is fine, although if you wanted more dramatic numbers you could go to a bunch of other states, where the residential numbers are around 2% or so.	M	D	Replaced std offer references where appropriate, removed transistional std offer from 6.1.3P1,	yes
Don't know if this is helpful, but the investment community refers to the "laddering" that you're describing	M		Added "(or dollar cost averaging)"	yes

as "dollar cost averaging"				
CHAPTER 6: UTILITY PLANNING AND INCENTIVE STRUCTURES **EPA LEADS: Tom Kerr & Stacy Angel**	**Minor (M)**	**Discuss (D)**	**Notes**	**Complete?**
Page 4				
Page 4 Not sure that a renewable tranche would necessarily result in lower prices. More stable I agree with, but in parts of the east you're buying stability by paying a bit more -- it's your insurance premium which may end up costing you less, or it may not. But that's why we have insurance...a slight recharacterization.	M		Removed "lower" from 6.1.4P4 before more stable prices	yes
p. 7 Under RPS, don't characterize it as just utilities being under the requirement. Also don't characterize it as acquire a given percent of their power -- it's often more of a REC requirement. (Don't want to add complexity here, but you might want to reword a bit)..	M		Deleted "utilities to acquire" & "their" from RPS para at 6.1.7P2	yes
p. 13 under "other states" even though Maine has a nice big number I'd be careful about that example, since it's below what the state's renewable supply was at the time it put its RPS in place, and in fact hasn't really led to new renewable development. Maybe use another RPS state.	M		Maine reference removed, Nevada added	yes
I'm assuming that the two sections on Utility Incentives for Demand Side Resources are just copies of one another.	M		N/A, yes they were copies	yes
Under the same 6.2 chapter, I like your clear description of the relationship between sales, revenues, throughput.		D	**Pending** – Stacy to add figure with throughput incentive illustrative calculations	**No**
p. 3: I continue to like the explanation,. A table showing a simplified calculation with hypothetical numbers could be helpful.		D	Same as above	No
p. 4 5th sentence of fist paragraph I think there's a word missing.	M		Added word "from"	yes
If memory serves, Gov. Owens (in his wisdom) vetoed the gas DSM bill in CO.	M		Colorado deleted since Gov. Owens vetoed it	yes

6.1 Decoupling and Utility Incentives	Minor (M)	Discuss (D)	Notes	Complete?
page 2: In the description of IRP, it should be clarified that utilities use IRPs to examine different procurement options, including energy efficiency, other demand-side resources, and different supply-side resource types (including different fuel types). And to assess which combinations of these various resources (i.e. portfolios) are best able to meet their ultimate objectives, including minimizing lifecycle costs, risk, and environmental impacts.	M		Edit above addressed some. Did not add "min lifecycle costs" to text, did not see fit for this detail	Yes
Page 4: In "Identifying Potential Resources," the supply options should (not "can") include renewable resources.	M		Deleted word "can" so parallel with provisions sentence	Yes
Page 5: The section on "Recognizing Environmental Costs" should be clarified. The examples cited, for example California "greenhouse gas adder," are not capturing resources' "environmental effects" nor are they "externality" values; instead, they represent the financial risk associated with likely future regulation. This is very different from the "externality" values used by some states in the early 1990s. The process of valuing the financial risk to customers associated with carbon emissions is based on an analysis of likely future policies to regulate carbon, and the expected "out-of-pocket" cost to customers associated with that regulation. Externality values, in contrast, would be intended to internalize the full societal cost associated with carbon emissions. See attached recent Electricity Journal that provides further detail.	M		Changed California para for fin risk of regulation 6.1.5P1	Yes
Other good examples of recent IRPs include Idaho Power, Puget Sound Energy, and Northwest Power and Conservation Council's Fifth Power Plan.	M		Test added for all, links on table	Yes
Page 9: The Rate Impact Measure test should not be included as a recommended cost-benefit test; under certain conditions energy efficiency programs can increase rates even while reducing customer bills (since by definition cost-effective energy efficiency programs lower overall revenue requirements) and will still provide a benefit to customers. The Participant Test also has serious limitations depending on its use, and generally can be useful in designing programs and incentive levels but should not be used as a threshold test for investment.	M		Added sentence to section starting "If using only one test, states are moving away…"	Yes

6.1 Decoupling and Utility Incentives (continued)	Minor (M)	Discuss (D)	Notes	Complete ?
- Page 1 3rd and 4th summary paragraph - Delete both paragraphs (starting "In states..." and "'Retail Choice' portfolio..."). I do not think they add anything crucial that is not already in the text box and summary text. Also find text confusing and distracting to our main intention for the section.		D	Paragraphs deleted, seems in line with comments of other reviewers	yes
- Page 2 2nd paragraph under benefits - Add reliability and security benefit sentence(s) at the end of the paragraph.	M		Added text	yes
- Page 3 5th and 8th paragraphs under Retail Choice Portfolio Management - Delete both paragraphs (starting "To implement a ladder..." and "Different states use laddering...") and add a sentence "Table 6.1.2 illustrates a basic 5-year ladder." to the end of the 7th paragraph (staring "As shown in Table 6.1.1..."). Again, these details do not add value for our intent and they distract with unneeded details. Also, I see no relation between our promoting ladder contracts to promoting clean energy. Good to keep in discussion of Portfolio Mgt, but recommend loosing the details.		D	Scaled down text, added tighter text	yes
- Page 4 under Forecasting & ID Potential Resources - Use this opportunity to discuss energy efficiency as a resources itself. This can be achieved by modifying second sentence under Forecasting to read "Utilities include expected energy efficiency improvements outside of the utility's energy efficiency resources in their load forecasts." and adding a sentence under ID Potential Resources on "Demand-side resources can include energy efficiency programs and demand response."	M		Edits made	yes
- Page 4, last paragraph - can we add "security" to list of criteria that can be used in IRP. I don't have an example of where that is happening today, but FERC is starting regional meetings on security constrained dispatch. This may become more of an issue for states as those meetings play out.	M		Added “security”	yes
- Page 8, Best Practices text box - add a sentence to the end of the text paragraph "States may balance the incorporation of these best practices with the need for a manageable process." This addresses what I've heard out of some parties that excessive reporting and modeling may be deferring some EE. Good to get Kathleen's read.		D	Discussed w/Kathleen, not added-doesn’t fit here	yes

- Page 13, Pennsylvania - PA just issued their first final order to implement their portfolio standard which includes EE and DG under DSM. Should we update the PA text to reflect this?	M		PA links are up-to-date, not edits made	yes
6.1 Decoupling and Utility Incentives (continued)	**Minor (M)**	**Discuss (D)**	**Notes**	**Complete ?**
General comment - I think this section would benefit from a paragraph on the interrelationship between state-regulated portfolio management and dispatch until an RTO. This could be useful context for Midwest states that are still in their first year of an RTO. Not to mention, … most folks on state and federal level are not clear on this interrelation yet.		D	No edits made due to scope of report, not raised by other reviewers	yes

6.2 Portfolio Management	**Minor (M)**	**Discuss (D)**	**Notes**	**Completed?**
note that publicly-owned utilities face the same disincentives to invest in energy efficiency and other demand-side resources as the investor-owned utilities. I've attached our recent Electricity Journal article that explores this issue.		D	Added sentence on 6.2.1, still more focus on non-jurisdiction in 6.1	yes
include an example of how decoupling works. I've attached the illustration that we often use. Source is: Bachrach, D., M. Ardema, A. Leupp, Energy Efficiency Leadership in California: Preventing the Next Crisis, Natural Resources Defense Council and Silicon Valley Leadership Group, April 2003, Appendix III. http://www.nrdc.org/air/energy/eecal/contents.asp		D	Repeat of above, Stacy to add table	No
include a discussion of why utilities and regulators should not use higher fixed customer charges instead of decoupling. While the reason is obvious – high fixed customer charges greatly diminish customers' incentives to use energy efficiently – utilities frequently propose higher fixed customer charges as a solution to instability in (or threats to) their fixed-cost recovery.	M		Text added 6.1.2, comment of other reviewers as well	yes
NRDC's joint statements with the EEI and the AGA provide good references. I have attached the NRDC/AGA statement, and the NRDC/EEI statement is at http://www.naruc.org/associations/1773/files/eei_nrdc.pdf .	M		Added link s to reports in 6.2 (gas) & 6.1 (elec)	yes
Page 1: in some places rate cases occur even less frequently	M		Removed	yes

than every 3-5 years. The longer the time between rate cases, the more decoupling is needed.			years	
6.2 Portfolio Management	**Minor (M)**	**Discuss (D)**	**Notes**	**Completed?**
Throughout the document, the description of decoupling must be revised from a focus on "profits" to a focus on "revenues" or "fixed-cost recovery." The largest problem that decoupling mechanisms address is that utilities' recover their fixed costs with volumetric charges, so any reduction in sales jeopardizes fixed-cost recovery. This problem is much much larger than any concern over "profits." The term "profit" is currently used throughout this document and should be replaced where appropriate. This relates to two additional items that I address under question number 5 below.		D	Many replacements done, **do we want to change the widelyused phrase "decoupling of profits from sales volume" to revenue as well?**	**No**
Page 2: the discussion of recovery of variable costs through regular adjustments (e.g. fuel adjustment clauses) should note that not all utilities have such mechanisms. It might also bear note someplace that in jurisdictions that do have fuel adjustment clauses, regulators / boards, utilities, and customers are accustomed to small frequent rate changes, which should make the true-ups for decoupling easier to accept as they are generally much smaller than the rate adjustments associated with variable costs.	M		Made edits to reflect "some states" 6.2.2, good broader comment but detail does not fit this section	yes
6.2 Portfolio Management	**Minor (M)**	**Discuss (D)**	**Notes**	**Complete?**
Page 2: discussion of financial incentives refers only to increased rates of return on efficiency investments. There are various reasons why a "shared-savings" mechanism is preferable as an incentive, and it should be highlighted in this up-front section.	M		Added sentence 6.2.2	yes
Page 2: the section entitled "Remove Disincentives through…" should emphatically only include decoupling as a solution to removing utilities' financial disincentives, not lost-revenue adjustment mechanisms. The document goes on to discuss the many reasons why lost-revenue adjustment mechanisms do not in fact remove the disincentive. This section should be re-framed to discuss the fact that some jurisdictions have adopted lost-revenue	M		Modified 6.2.3p1	yes

adjustment mechanisms but that it's not a model that should be copied for the reasons given.				
6.2 Portfolio Management	**Minor (M)**	**Discuss (D)**	**Notes**	**Complete d?**
Pages 4-5: the section on performance incentives should highlight shared-savings mechanisms more, as we believe they are the most effective type of incentive. California also has a successful history with the shared-savings approach. (CPUC Decision 03-10-057 provides a discussion of the success of the California shared-savings mechanism and also includes a history of the mechanisms for efficiency in Calif.) This section should discuss the pros and cons of various approaches. For example, shared-savings mechanisms most closely align utility and customer interests in pursuit of maximum savings at lowest cost. Increased returns on investment for energy efficiency are familiar mechanisms to utility industry stakeholders, but they reward spending, not savings.	M		Edits made to California summary	yes
Page 5: list of participants should include consumer advocates.	M		Added to "other organizaton s"	yes
Page 6: I don't think public benefit funds in any way "reduce the need for lost revenue mechanism and shareholder incentives." As the report discusses, three policies are key to success: decoupling, cost-recovery, and performance incentives. Public benefit funds only take care of cost-recovery. Moreover, as discussed above, lost revenue mechanisms are ineffective.	M		Delete last sentence under PBF bullet 6.2.6	yes
Page. 7: The California numbers of 12,000 MW etc. are from both utility programs and state building and appliance efficiency codes and standards. In the next paragraph, 2005-6 are emphatically not the first year that efficiency targets in California have been set based on technical potential studies. The California utilities have used potential studies for many years to establish their program plans and targets. The change is that the CPUC has set specific ten-year energy saving targets for the utilities.	M		Edits/updat es made to California section	yes
Page 7: California has also stated its intent to establish performance-based incentives for energy efficiency once again. See the Energy Action Plan II and CPUC Decision 05-09-043.	M		Edits/updat es made to California section	yes

6.2 Portfolio Management	**Minor (M)**	**Discuss (D)**	**Notes**	
Page 10: under “what states can do” again remove “lost revenue adjustment mechanisms”	M		Deleted entire clause “through decoupling or LRAM” so not directing one or the other	yes
Chapter 6.2, page 7 - add Maryland as an example state with Baltimore Gas and Electric's and Washington Gas's decoupled gas tariffs. These use monthly true-ups and have been in use, successfully, for a few years now.	M		MD added to text and table	yes
- Page 3, midway through 3rd paragraph - Sentence starting "Furthermore, if a utility's sales" seems to recommend that PUCs should put weather and economic risk on the customer, not the utility. RAP supports this (source is 1994 RAP paper) because it keeps utility stock more stable. I suspect some PUCs may not support this since it increase rate variation to customer. Do we want to be recommending it? We could add text to call out how decoupling is transferring who is assuming what risk and which risks could be shared between customer and utility. A table could be helpful to illustrate this.		D	No edits made, comment from Stacy only, she is comfortable as is	yes
- Page 4, Program Cost Recovery section - add langauge that this cost recovery is for cost-effective EE that, even with cost recovery in rate base, customers are better off. Since PUCs/states are focused on customer, I'm concerned they will read this section and react that it's another way for utility to make money and raise rates. Our point is that customers are already investing in EE that they understand will have <2 (if not 1) year payback, utility dollars could support cost-effective EE that isn't being done but is still cost effective compared to other resources which customers would be paying for anyway. Text reference to Chapter 6.1 and one sentence could achieve this point without distracting the discussion.	M		Added cost-effectivenes s to page 4, first para	yes
- Page 4, Program Cost Revocery section last sentence -	M		Colorado	yes

Update the Colorado bill text. - Page 4, Shareholder/Co first paragraph, last sentence - delete the "-" after supply.			removed due to veto, "-" left for grammar	
- Page 5, Participants - Add consumer advocates either within Other Organizations or as a separate bullet.	M		Done per above	yes
6.2 Portfolio Management	**Minor (M)**	**Discuss (D)**	**Notes**	**Complete?**
- Page 7 California - add short paragraph to note how CA IOUs have reorganized their demand-side marketing programs to integrate EE and DR and target best practices for customer, not program-specific.	M		Edits made to California section	yes

CHAPTER 6: UTILITY PLANNING AND INCENTIVE STRUCTURES **EPA LEADS: Tom Kerr & Stacy Angel** *** Managed changes completed for Chapter 6 sections**	**Notes**
Opening Section The policy description and objective summary lacks a clear explanation that portfolio management and IRP are economic optimization strategies. Resource diversification is not the strategy. Comparative economic analysis which optimizes among resources at a mutual point of lowest cost and desired level of risk is the strategy. Resource diversification is a likely output of the strategy, but the goal is not diversification for the sake of diversifying. For example, it is possible for an IRP process to end up selecting a great amount of a single resource if the cost and risk level of that resource are both quite low. Forecasting Good IRP and PM uses end use forecasting which build upwards from individual end uses within each customer class. This is in contrast to more typical macro-economic forecasts that in which demand is function of overall economic conditions and not identified to specific end uses, or only broadly so.	All Completed

The end-use forecast analysis will analyze growth and change to very specific end uses: heating loads, cooling load, lighting, household and office electronics and motor power, etc. This type of forecasting not only gives a more accurate picture of how demand will grow, but also indicates the prime targets for energy efficiency activity.	

6.1 Portfolio Management Strategies **EPA LEADS: Tom Kerr & Stacy Angel** *** Managed changes completed for Chapter 6 sections**	**Notes**
Page 1, Top Box under Policy Description and Objective - I think an important element, risk management or uncertainty, is missing. Rewrite first sentence: **Portfolio management refers to energy resource planning that incorporates a variety of energy resources, including supply-side (e.g., traditional and renewable energy sources) and demand-side (e.g., energy efficiency) options with a priority to manage uncertainty.** I will expect this "uncertainty" idea to turn up in the section.	**Completed**
Page 1, Summary, paragraph 1 - beginning of second sentence, delete “can also help” and insert “helps”; end of second sentence, delete “and”; after environmental issues delete period and insert “and uncertain future events.”	
Page 1, Summary, paragraph 2 – end of last sentence, after resources delete period and insert “that balances costs, benefits and risks.”	
Page 1, Summary, paragraph 3 – end of last sentence, after options delete period and insert “and factor in key contingencies.”	
Page 1, Summary, paragraph 4 – beginning of first sentence delete “portfolio management by deregulated utilities” and insert “supplying electricity in states”; middle of second sentence delete “from” and insert “of default service from”; end of second sentence delete “requiring” and insert “requiring attention to various diversification and risk management strategies, sometimes utilizing”	
6.1 Decoupling and Utility Incentives (continued) EPA LEADS: Tom Kerr & Stacy Angel * Managed changes completed for Chapter 6 sections	
Section 6.1, Portfolio Management section – The Northwest Power and Conservation Council (NPCC) does some of the best IRP in my opinion, and they have been doing it for ~25 years. Their recent 5th plan is excellent, and they also have info. on the value and benefits of previous plans. I think this merits coverage if not a case study.	

Section 6.1, under IRP or somewhere in this section, you should discuss the different options for resource planning objectives and evaluation criteria. The preferred objective is to minimize the net present value of revenue requirements (i.e., total bills paid by customers), not minimizing rates. Some states including Colorado have used the latter, and this makes it very difficult for demand-side measures which reduce consumption and bills but not rates, to appear to be cost-effective. This is an important distinction that should be clearly presented. This issue is related to the question of which test is used to evaluate the cost effectiveness of DSM programs (i.e., if the resource planning goal is minimizing bills, then the TRC or societal test is used to evaluate DSM programs), but the resource planning objective is still a separate broader issue. Likewise, under Actions Steps for States, I suggest adding: "Adopt Integrated Resource Planning requirements that strive to minimize total revenue requirements (i.e., total bills paid by customers) rather than electricity rates."	
Section. 6.1, p. 5 – Xcel Energy, not Excel. Also, in the para. on MN on p. 7, there was further legislation in 1991 that established the requirements that utilities are now operating under, e.g., NSP/Xcel must spend at least 2% of revenues on DSM programs. Also, I do not think it is accurate to say "In developing their IRPs, utilities aim to meet 50-75% of new demand with DSM resources."	

6.2 Portfolio Management EPA LEADS: Tom Kerr & Stacy Angel * Managed changes completed for Chapter 6 sections	**Notes**
1. Section 6.2, p. 2 – Recovering the costs of utility DSM or DG programs is standard practice and does NOT remove financial disincentives to DSM or DG, let alone provide positive financial incentives. Cost recovery is not enough, and this should be acknowledged.	**Completed**
Section 6.2, p. 8 – I would lead with the electricity incentive mechanism that exists in Minnesota as it has been around for a number of years and is a model incentive mechanism in my view. It might even be worth including a table on the bonus structure for NSP/Xcel Energy since it is an incentive based on level of energy savings achieved as well as overall net economic benefits of the DSM programs. Also, add a reference in the table on p. 11 to the Minnesota incentives. We are trying to find a reference for you that is on the internet, but haven't so far.	
Section 6.2, p. 9 – The section at the end of the page about	

Colorado should be removed. This legislation was vetoed by Gov. Bill Owens, and consequently is not worth mentioning. Ditto for the table on p. 11. The Arizona proposal is still "on the table", and the New Mexico PUC has not taken any action yet regarding removal of financial disincentives.	
Section 6.2 is well-written and important, but it including it once is enough!	
Rich Sedano's comments - pdfs	
Page 1, Top Box under Policy Description and Objective – first sentence, delete "others" and insert "many"	
Page 1, Top Box under Policy Description and Objective – second sentence, delete comma after disincentives and insert "and more,"	
Page 1, Benefits - A point that may not fit well in this text, but which I think is an important overarching idea is that this different way of regulating should not just motivate utilities to accept EE and DG that the state directs or that customers bring to them. Rather, these changes should motivate utilities to affirmatively find these resources because they are good for the system and the utility will be no worse off (and will be perhaps better off) that if they had a more limited set of available resources.	
Page 1, Background on Utility Incentive Structures - middle of second sentence, delete "every 3-5 years" and insert "from time to time" (note: rate cases can happen every year and do in a volatile environment)	
Page 2, end of paragraph continued from page 1 - Fuel clauses are typical, but they are not everywhere. Pointing out that places with fuel clauses have more of disincentive for EE than those without is an important step in this logic.	
Page 2, paragraph 1, first sentence - There is another slant on this. The surplus revenue associated with greater sales than assumed in the rate case allows the utility to absorb more easily cost increases in their business. In a more performance-oriented regulatory system, cost increase pressures might be dealt with more aggressively (including through EE and DG) and prevented.	
Page 2, States with Utility Incentive Programs for Demand-Side Resources, second bullet, Recover Costs - "Possible" may be the wrong word. "Reasonable opportunity" may be a better way to describe this.	
Page 2, States with Utility Incentive Programs for Demand-Side Resources - I am not sure which of these three categories deals with recovering lost profits from lost sales. This is not a "cost"	

though it may be considered an "opportunity cost."	
Page 2, States with Utility Incentive Programs for Demand-Side Resources, third bullet, Reward Performance - RI approach is to provide an incentive, but the incentive is basically is the opportunity to recover some of the lost profits due to avoided sales through performance incentives. Not done as a return incentive. Some like this better because it does not contaminate the company's overall return on equity investment calculation.	
Page 2, States with Utility Incentive Programs for Demand-Side Resources, last paragraph - Is it worth emphasizing the converse? that a state with incentive for EE while maintaining persistent disincentives will have conflicts and will inevitably be falling short of objectives.	
Page 3, paragraph 1 - Plus, the LRAM approach only operates on energy efficiency, while decoupling can influence efficient utility operations company-wide.	
Page 3, Table 6.2.1, Approaches to Removing Disincentives to Energy Efficiency Investment: Decoupling vs. Lost Revenue Adjustments – Source, delete Mosovitz and insert Moskovitz	
Page 4, Shareholder/Company Performance Incentives, paragraph 1, end of second sentence - and an important resource alternative to meet future customer needs.	
Page 5, Participants, first bullet, State Legislatures, second sentence - or to remove barriers to elements like periodic resetting of rates without a comprehensive rate case	
Page 5, Participants, third bullet, State Energy Offices/Executive Agencies - their advocacy can be important to encourage utilities or regulators worried about change.	
Page 8, paragraph 1 about Oregon - I think new corporate owners (after an acquisition) were not convinced that decoupling was for them.	
Page 10, What States can Do - Here is a potential negative result. Utilities may see the raising of the issue of decoupling as an opportunity to change rate design to one in which more dollars are recovered in fixed charges (especially the customer charge). This rate design shift reduces risk for utility cash flow and reduces profits from new sales, but is not what decoupling is all about, it is regressive, it diminishes energy efficiency and DG motivation for the customer.	
Page 10, Action Steps for States - States should consider all the	

ways that performance incentives can improve service to customers in quality and cost, and consider what incentives are needed to get those improvements. (not just about EE and DG)	
Page 12, top of page, under Title/Description – delete Mosovitz and insert Moskovitz.	
Page 12, References, fifth reference - delete Mosovitz and insert Moskovitz.	

IV. Internal Timetable for Review Process

Clean Energy-Environment Guide to Action
Internal Schedule for Incorporating Review Comments and Publishing Report:
Draft – October 6, 2005

Schedule for Incorporating Peer Review Comments

Action	**Who**	**Due Date**
Reviewers submit comments – Chapters 1-5	All Reviewers	9/30/05
EPA compiles and summarizes comments, key issues	Denise	10/5/05
Discuss key issues and proposed response with Kathleen	Julie et al	10/6/05
Final comments due – Chapter 6, plus stragglers	Chapt. 6 reviewers	10/7/05
Comments distributed to chapter and section leads	Denise	10/6/05 & 10/11/05 for Ch. 6
Chapter and section leads review comments and mark up with instructions to contractor staff	Section leads	10/14/05
• Stratus and subs – Chapts. 1-3; Synapse: Chapt. 6; • Navigant / EEA – Chapts. 5 and supply sections of Chapt. 1 and Sections 3.2, 3.3	Steve and Stacy Katrina, Joe, Tom	
Contractors incorporate reviewer comments and send revised drafts back to EPA for technical review	Steve, Katrina, Joe	10/21/05
EPA conducts final technical review/edits	Section leads	10/26/05
Management signs off on final text for publication	**Julie, Tom,**	

	Kathleen	**10/28/05**

Schedule for Executive Summary

Stratus submits executive summary for EPA review	Steve	10/26/05
Section leads, management review executive summary	Section Leads, Julie, Tom, Kathleen	
EPA sends comments back to Stratus	Steve	11/1/05
Final executive summary ready for publication	Steve	11/4/05

[NOTE -- ALL TEXT EDITS AND REVISIONS MUST BE MADE BEFORE THE DOCUMENT SECTIONS GO TO THE FINAL PUBLICATION STEP]

Schedule for Completing Final Publication

Action	**Who**	**Due Date**
Develop graphics layout and color options	Steve / ERG	10/7/05
Generate graphs, figures tables and maps (Note – your contractors may need to provide technical input or data to graphics)	ERG	10/28/05
Copyedit all report content (chapters 1-6, appendixes)	ERG	11/11/05
EPA review copyedited text/clarify discrepancies	Steve / Katrina	11/15/05
EPA SIGNS OFF ON FINAL COPYEDIT	Julie, Tom, Kathleen	11/17/05
Flow text into graphics layout	ERG	11/22/05
Conduct S. 508 accessibility tagging and markup	ERG/Wendy	11/29/05
Document posted on EPA's Clean Energy Web site	Wendy	December 1
Print files sent to EPA print shop for publication	ERG / Steve	December 2

V. Link to Final Product

Approved by Kathleen Hogan