

DEPARTMENT OF EDUCATION AND EARLY DEVELOPMENT
COMPILED PUBLIC COMMENT AND DEPARTMENT RESPONSES
RETRO-COMMISSIONING COMPLIANCE REGULATION IMPLEMENTATION

AUGUST 5, 2020 TO SEPTEMBER 21, 2020

PUBLIC COMMENT RECEIVED	PUBLIC COMMENT RECEIVED	DEED RESPONSE
Q1. To help us better add value and context to your survey answers, please identify your organization (if any).	LKSD – 8/10/2020	
Q2. What is your general assessment of the proposed RCx planning cost (PC) basis of \$0.50/sf plus \$2000?	Seems far too low.	DEED will monitor this metric as real-world efforts occur. Also, if the sense that this metric based on an industry norm is way off, we may also need to improve clarity regarding the scope of this effort.
Q3. What is your general assessment of the proposed RCx implementation cost (IC) basis of \$0.50/sf times the Cost Model geographic cost factor?	Seems far too low.	DEED will monitor this metric as real-world efforts occur.
Q4. What is your general assessment of the proposed RCx anticipated annual savings (AAS) basis of 7 percent of electricity and fuel costs?	Seems far too high. <i>LKSD Site Administrators have no responsibility in operation and maintenance of electrical and mechanical systems. The SAs are the site maintenance position supervisors.</i>	DEED will monitor this metric as real-world efforts occur. We acknowledge that over-projection of savings could result in implementations that are not effective (i.e., do not achieve a reasonable ROI).
Q5. Other comments on the proposed RCx effectiveness calculation?	<i>The calculation does not account for the lack of supervision at the site level to implement this plan to achieve the intended results. You can't manage what you don't measure.</i>	DEED's understanding of RCx and the proposed industry projections is that they result primarily from adjustments to building automation with little resulting from user-driven building operations. Such results can clearly be adversely impacted by poor energy management at a user level.

PUBLIC COMMENT RECEIVED	PUBLIC COMMENT RECEIVED	DEED RESPONSE
Q6. DEED is proposing that all buildings classified as "main schools" be initially considered regardless of size. Does this seem appropriate or should there be a size cut-off similar to that proposed for education-related facilities?	Seems appropriate.	Thanks for your response.
Q7. DEED is proposing that other education-related facilities over 5,000sf be initially considered. Does this seem appropriate or should a different facility size be used to ensure an appropriate level of complexity and energy payback potential?	Any building listed in the DEED database, permanent or temporary, should be included as they all consume energy in support of schools. Also need to include the floor if including walls and roof.	Industry analysis indicates that an ROI on RCx is not fully scalable to all building sizes. DEED will monitor this metric as real-world efforts occur.
Q8. DEED is proposing that the above-identified facilities be screened to ensure their primary energy-use systems are within the range of the anticipated useful life of those systems. Is this screening appropriate?	Seems appropriate.	Thanks for your response.
Q9. DEED is proposing that the above-identified facilities be screened to ensure they include an integrated building automation system that was installed or renovated within the past 20 years. Is this screening appropriate?	Doesn't seem appropriate., Could be appropriate if . . . (please specify): Smaller support facilities consume energy, but may not be economical to install building automation controls.	DEED agrees there may be facilities where better manual control of energy systems could improve energy use. Our assumption, without any real backup, is that the labor cost of manual control would prohibit achieving an ROI.
Q10. How clear are these options and the tools that would be used to implement them?	I would recommend <i>using</i> DEED's. <i>However, DEED needs to recognize that the educators run LKSD facilities, not facilities staff. DEED needs to require school district administrations (and their school boards) to participate in this process. Otherwise you will get NO buy-in from REAAs. My \$0.02.</i>	Thank you. DEED's understanding of RCx and the proposed industry projections is that they result primarily from adjustments to building automation with little resulting from user-driven building operations. We will try to remain aware of how this understanding meets reality.

PUBLIC COMMENT RECEIVED	PUBLIC COMMENT RECEIVED	DEED RESPONSE
<p>Q11. How important is it to have all of these options available for compliance?</p>	<p>Very important: options for compliance is vital. <i>Every district is different, every school in a district is different, some districts have separate climatic considerations within their district schools.</i></p>	<p>Thanks for your response.</p>
<p>Q12. If you are a district facility manager or superintendent, which option are you most likely to use? Option 1 - Internal tools and assessments. Option 2 - State tools and assessments. Option 3 - EPA tools and EPA/State assessments. A combination of options (see comments).</p>	<p>Option 1 -Not likely Option 2 - Maybe Option 3 - Not likely A combination of options (see comments) - Somewhat unlikely. Comments: <i>If the Superintendent is a part of this discussion, I apparently don't need to know. I am only responsible for managing the construction of the school, nothing further.</i></p>	<p>Thanks for your response.</p>
<p>Q13. Do you have any final thoughts or comments on the implementation of this regulation?</p>	<p>The implementation will fail. DEED needs to work with the teaching staff if you want anything implemented.</p>	<p>Thanks for your response.</p>
<p>Q14. If you would like to receive a response to your survey answers please provide the following:</p>	<p>Respondent skipped this question</p>	

PUBLIC COMMENT RECEIVED	PUBLIC COMMENT RECEIVED	DEED RESPONSE
Q1. To help us better add value and context to your survey answers, please identify your organization (if any).	FNBSD - 8/27/2020	
Q2. What is your general assessment of the proposed RCx planning cost (PC) basis of \$0.50/sf plus \$2000?	Seems about right.	Thanks for your response.
Q3. What is your general assessment of the proposed RCx implementation cost (IC) basis of \$0.50/sf times the Cost Model geographic cost factor?	Seems about right.	Thanks for your response.
Q4. What is your general assessment of the proposed RCx anticipated annual savings (AAS) basis of 7 percent of electricity and fuel costs?	Seems about right.	Thanks for your response.
Q5. Other comments on the proposed RCx effectiveness calculation?	Respondent skipped this question	
Q6. DEED is proposing that all buildings classified as "main schools" be initially considered regardless of size. Does this seem appropriate or should there be a size cut-off similar to that proposed for education-related facilities?	Seems appropriate	Thanks for your response.
Q7. DEED is proposing that other education-related facilities over 5,000sf be initially considered. Does this seem appropriate or should a different facility size be used to ensure an appropriate level of complexity and energy payback potential?	Seems appropriate	Thanks for your response.

PUBLIC COMMENT RECEIVED	PUBLIC COMMENT RECEIVED	DEED RESPONSE
Q8. DEED is proposing that the above-identified facilities be screened to ensure their primary energy-use systems are within the range of the anticipated useful life of those systems. Is this screening appropriate?	Seems appropriate	Thanks for your response.
Q9. DEED is proposing that the above-identified facilities be screened to ensure they include an integrated building automation system that was installed or renovated within the past 20 years. Is this screening appropriate?	Seems appropriate	Thanks for your response.
Q10. How clear are these options and the tools that would be used to implement them?	Easy to understand	Thanks for your response.
Q11. How important is it to have all of these options available for compliance?	Somewhat important; options for compliance may be helpful	Thanks for your response.
Q12. If you are a district facility manager or superintendent, which option are you most likely to use? Option 1 - Internal tools and assessments. Option 2 - State tools and assessments. Option 3 - EPA tools and EPA/State assessments. A combination of options (see comments).	Option 1 - Somewhat likely Option 2 - Highly likely Option 3 - Somewhat unlikely A combination of options (see comments). - Maybe	Thanks for your response.
Q13. Do you have any final thoughts or comments on the implementation of this regulation?	Respondent skipped this question	
Q14. If you would like to receive a response to your survey answers please provide the following:	Respondent skipped this question	

PUBLIC COMMENT RECEIVED	PUBLIC COMMENT RECEIVED	DEED RESPONSE
Q1. To help us better add value and context to your survey answers, please identify your organization (if any).	ASD - 8/28/2020	
Q2. What is your general assessment of the proposed RCx planning cost (PC) basis of \$0.50/sf plus \$2000?	Seems far too low.	DEED will monitor this metric as real-world efforts occur. Also, if the sense that this metric based on an industry norm is way off, we may also need to improve clarity regarding the scope of this effort.
Q3. What is your general assessment of the proposed RCx implementation cost (IC) basis of \$0.50/sf times the Cost Model geographic cost factor?	Seems far too low	DEED will monitor this metric as real-world efforts occur.
Q4. What is your general assessment of the proposed RCx anticipated annual savings (AAS) basis of 7 percent of electricity and fuel costs?	Seems about right	Thanks for your response.
Q5. Other comments on the proposed RCx effectiveness calculation?	<i>Having significant amount of experience in facilities and construction in Alaska. I believe this math is inaccurate. The cost of materials and systems and labor are significantly more than the lower 48. This was based on a study of 224 buildings across 21 states. From the math I doubt Alaska and Hawaii were included. To get a 7% savings on heating and lighting is very doable in Alaska schools. I do not think it is doable at 0.50 cents a sq ft.</i>	DEED is not aware of the actual locations in the cited study. However, using a percentage-based analysis helps to norm the results and applicability across instances and regions with differing construction and operating costs. See other comments above.

PUBLIC COMMENT RECEIVED	PUBLIC COMMENT RECEIVED	DEED RESPONSE
<p>Q6. DEED is proposing that all buildings classified as "main schools" be initially considered regardless of size. Does this seem appropriate or should there be a size cut-off similar to that proposed for education-related facilities?</p>	<p>Doesn't seem appropriate., Could be appropriate if . . . (please specify): <i>I think that every school should be considered. There are many schools I have been to that could benefit from this due to their smaller size, that do not meet the 5000 gsf requirement but could see significant cost savings.</i></p>	<p>DEED is proposing that every main school be considered regardless of size (notwithstanding there are other 'inclusion' metrics).</p>
<p>Q7. DEED is proposing that other education-related facilities over 5,000sf be initially considered. Does this seem appropriate or should a different facility size be used to ensure an appropriate level of complexity and energy payback potential?</p>	<p>Doesn't seem appropriate. Could be appropriate if . . . (please specify): <i>I think support facilities should have different requirements to be considered.</i></p>	<p>Thanks for your response.</p>
<p>Q8. DEED is proposing that the above-identified facilities be screened to ensure their primary energy-use systems are within the range of the anticipated useful life of those systems. Is this screening appropriate?</p>	<p>Seems appropriate.</p>	<p>Thanks for your response.</p>
<p>Q9. DEED is proposing that the above-identified facilities be screened to ensure they include an integrated building automation system that was installed or renovated within the past 20 years. Is this screening appropriate?</p>	<p>Doesn't seem appropriate. Could be appropriate if . . . (please specify): <i>20 years is extremely old. I think you should include older facilities so you could put money to use improving those facilities and seeing increased cost savings.</i></p>	<p>Energy consumption improvements in facilities with control systems older than 20 years are likely to require investments other than in the operational tuning that occurs in RCx. This would include capital investments to upgrade facilities to ASHRAE Standard 90.1, etc.</p>
<p>Q10. How clear are these options and the tools that would be used to implement them?</p>	<p>Somewhat clear.</p>	<p>Thanks for your response.</p>
<p>Q11. How important is it to have all of these options available for compliance?</p>	<p>Very important: options for compliance is vital.</p>	<p>Thanks for your response.</p>

PUBLIC COMMENT RECEIVED	PUBLIC COMMENT RECEIVED	DEED RESPONSE
<p>Q12. If you are a district facility manager or superintendent, which option are you most likely to use?</p> <p>Option 1 - Internal tools and assessments.</p> <p>Option 2 - State tools and assessments.</p> <p>Option 3 - EPA tools and EPA/State assessments.</p> <p>A combination of options (see comments).</p>	<p>Option 1 Somewhat likely</p> <p>Option 2 - Somewhat likely</p> <p>Option 3 Somewhat likely</p> <p>Comments: <i>I intend to utilize every tool available to substantiate what tool is best.</i></p>	<p>Thanks for your response.</p>
<p>Q13. Do you have any final thoughts or comments on the implementation of this regulation?</p>	<p><i>I think the age of these systems needs to be truly evaluated. If money was spent on upgrading systems slowly we could reduce the huge year over capital spending. Small to moderate improvements year over and integrating new technology will save the Alaska significant money.</i></p>	<p>Thanks for your response.</p>
<p>Q14. If you would like to receive a response to your survey answers please provide the following:</p>	<p>Respondent skipped this question</p>	

PUBLIC COMMENT RECEIVED	PUBLIC COMMENT RECEIVED	DEED RESPONSE
Q1. To help us better add value and context to your survey answers, please identify your organization (if any).	KPBSD - 9/15/2020	
Q2. What is your general assessment of the proposed RCx planning cost (PC) basis of \$0.50/sf plus \$2000?	Seems a little low	DEED will monitor this metric as real-world efforts occur.
Q3. What is your general assessment of the proposed RCx implementation cost (IC) basis of \$0.50/sf times the Cost Model geographic cost factor?	Seems a little low	DEED will monitor this metric as real-world efforts occur.
Q4. What is your general assessment of the proposed RCx anticipated annual savings (AAS) basis of 7 percent of electricity and fuel costs?	Seems about right.	Thanks for your response.
Q5. Other comments on the proposed RCx effectiveness calculation?	Respondent skipped this question	
Q6. DEED is proposing that all buildings classified as "main schools" be initially considered regardless of size. Does this seem appropriate or should there be a size cut-off similar to that proposed for education-related facilities?	Seems appropriate.	Thanks for your response.
Q7. DEED is proposing that other education-related facilities over 5,000sf be initially considered. Does this seem appropriate or should a different facility size be used to ensure an appropriate level of complexity and energy payback potential?	Doesn't seem appropriate.	Thanks for your response.

PUBLIC COMMENT RECEIVED	PUBLIC COMMENT RECEIVED	DEED RESPONSE
Q8. DEED is proposing that the above-identified facilities be screened to ensure their primary energy-use systems are within the range of the anticipated useful life of those systems. Is this screening appropriate?	Seems appropriate	Thanks for your response.
Q9. DEED is proposing that the above-identified facilities be screened to ensure they include an integrated building automation system that was installed or renovated within the past 20 years. Is this screening appropriate?	Seems appropriate	Thanks for your response.
Q10. How clear are these options and the tools that would be used to implement them?	Respondent skipped this question	
Q11. How important is it to have all of these options available for compliance?	Somewhat important; options for compliance may be helpful	Thanks for your response.
Q12. If you are a district facility manager or superintendent, which option are you most likely to use? Option 1 - Internal tools and assessments. Option 2 - State tools and assessments. Option 3 - EPA tools and EPA/State assessments. A combination of options (see comments).	Option 1 - Somewhat likely Option 2 - Highly likely Option 3 - Somewhat likely A combination of options (see comments). - Somewhat likely	Thanks for your response.
Q13. Do you have any final thoughts or comments on the implementation of this regulation?	Respondent skipped this question	
Q14. If you would like to receive a response to your survey answers please provide the following:	Respondent skipped this question	

PUBLIC COMMENT RECEIVED	PUBLIC COMMENT RECEIVED	DEED RESPONSE
Q1. To help us better add value and context to your survey answers, please identify your organization (if any).	Project Resources - 9/22/2020	
Q2. What is your general assessment of the proposed RCx planning cost (PC) basis of \$0.50/sf plus \$2000?	Seems about right. <i>I think the estimate formula is reasonably accurate but the unfunded mandate of doing the RCx is not affordable by most districts.</i>	Thanks for your response. The cost of under-performing buildings is also high. The regulation requires regular assessment of RCx need and effectiveness. It does not mandate performance of RCx.
Q3. What is your general assessment of the proposed RCx implementation cost (IC) basis of \$0.50/sf times the Cost Model geographic cost factor?	Seems far too high. <i>Again, not affordable.</i>	DEED will monitor this metric as real-world efforts occur. [Your comments suggest you may mean too low.] Also, if the sense that this metric based on an industry norm is way off, we may also need to improve clarity regarding the scope of this effort.
Q4. What is your general assessment of the proposed RCx anticipated annual savings (AAS) basis of 7 percent of electricity and fuel costs?	Seems a little high.	DEED will monitor this metric as real-world efforts occur.
Q5. Other comments on the proposed RCx effectiveness calculation?	<i>The formulas maybe fine but I think it will be hard to realize actual savings. This reminds me of what AFHC tried to do. They paid for the energy audits and did not get any takers to implement improvements that had positive ROI. Some of the issue was related to how utilities charged for electricity.</i>	DEED will monitor all metrics as real-world efforts occur. We acknowledge that under-projection of expenses and over-projection of savings could result in implementations that are not effective (i.e., do not achieve a reasonable ROI). DEED is aware of many energy related projects that grew out of the AHFC audits even if few or none participated in their financing program.

PUBLIC COMMENT RECEIVED	PUBLIC COMMENT RECEIVED	DEED RESPONSE
Q6. DEED is proposing that all buildings classified as "main schools" be initially considered regardless of size. Does this seem appropriate or should there be a size cut-off similar to that proposed for education-related facilities?	Respondent skipped this question	
Q7. DEED is proposing that other education-related facilities over 5,000sf be initially considered. Does this seem appropriate or should a different facility size be used to ensure an appropriate level of complexity and energy payback potential?	What about doing a couple of test cases. Maybe Rasmussen, Denali Comm or another foundation would provide matching funds to partner with a variety of schools to see what can be achieved. AHFC might still be sitting on an appropriation.	DEED would actively support any district in securing operating funds to accomplish pilot efforts.
Q8. DEED is proposing that the above-identified facilities be screened to ensure their primary energy-use systems are within the range of the anticipated useful life of those systems. Is this screening appropriate?	Seems appropriate	Thanks for your response.
Q9. DEED is proposing that the above-identified facilities be screened to ensure they include an integrated building automation system that was installed or renovated within the past 20 years. Is this screening appropriate?	Seems appropriate	Thanks for your response.
Q10. How clear are these options and the tools that would be used to implement them?	Respondent skipped this question	
Q11. How important is it to have all of these options available for compliance?	Very important: options for compliance is vital.	Thanks for your response.

PUBLIC COMMENT RECEIVED	PUBLIC COMMENT RECEIVED	DEED RESPONSE
<p>Q12. If you are a district facility manager or superintendent, which option are you most likely to use?</p> <p>Option 1 - Internal tools and assessments.</p> <p>Option 2 - State tools and assessments.</p> <p>Option 3 - EPA tools and EPA/State assessments.</p> <p>A combination of options (see comments).</p>	<p>Respondent skipped this question</p>	
<p>Q13. Do you have any final thoughts or comments on the implementation of this regulation?</p>	<p>Well intended but likely to pose a challenge for most Districts</p>	<p>DEED is working diligently to support districts in providing tools. We agree there will be challenges to the regular assessment process.</p>
<p>Q14. If you would like to receive a response to your survey answers please provide the following:</p>	<p>Respondent skipped this question</p>	

PUBLIC COMMENT RECEIVED	PUBLIC COMMENT RECEIVED	DEED RESPONSE
Q1. To help us better add value and context to your survey answers, please identify your organization (if any).	Unknown - 9/21/2020 Respondent skipped this question	
Q2. What is your general assessment of the proposed RCx planning cost (PC) basis of \$0.50/sf plus \$2000?	Seems far too low.	DEED will monitor this metric as real-world efforts occur. Also, if the sense that this metric based on an industry norm is way off, we may also need to improve clarity regarding the scope of this effort.
Q3. What is your general assessment of the proposed RCx implementation cost (IC) basis of \$0.50/sf times the Cost Model geographic cost factor?	Seems far too low.	DEED will monitor this metric as real-world efforts occur.
Q4. What is your general assessment of the proposed RCx anticipated annual savings (AAS) basis of 7 percent of electricity and fuel costs?	Seems a little high.	DEED will monitor this metric as real-world efforts occur. We acknowledge that over-projection of savings could result in implementations that are not effective (i.e., do not achieve a reasonable ROI).
Q5. Other comments on the proposed RCx effectiveness calculation?	<i>I think the idea of basing energy consumption on this model is a good direction to be going and will plan to set up a spreadsheet for this conversion. I just think your costs are underestimated and the incentive to implement this program is very low if you are hoping for participation.</i>	All districts requesting capital funding through AS14.11 will be required to participate. Because of this 'high bar', DEED is committed to assisting districts with compliance efforts. (Cost concerns addressed previously.)
Q6. DEED is proposing that all buildings classified as "main schools" be initially considered regardless of size. Does this seem appropriate or should there be a size cut-off similar to that proposed for education-related facilities?	Seems appropriate	Thanks for your response.

PUBLIC COMMENT RECEIVED	PUBLIC COMMENT RECEIVED	DEED RESPONSE
Q7. DEED is proposing that other education-related facilities over 5,000sf be initially considered. Does this seem appropriate or should a different facility size be used to ensure an appropriate level of complexity and energy payback potential?	Doesn't seem appropriate.	Thanks for your response.
Q8. DEED is proposing that the above-identified facilities be screened to ensure their primary energy-use systems are within the range of the anticipated useful life of those systems. Is this screening appropriate?	As long as systems in place are working properly. System failures occur regardless of planning and if cost considerations preceded practical application and a system fails there need to be contingencies to replace the failed system.	Thanks for your response.
Q9. DEED is proposing that the above-identified facilities be screened to ensure they include an integrated building automation system that was installed or renovated within the past 20 years. Is this screening appropriate?	If your maintenance staff training is monitored to keep up with the technological demands of the BAS. Too many times the technology is too advanced, and the system becomes an expensive "Off/On" switch.	DEED recognizes this as a related area of concern. Energy efficient building do require operational know-how and maintenance.
Q10. How clear are these options and the tools that would be used to implement them?	For the person responsible for translating this need to their staff for implementation, there needs to be significant training to stress the need for any implementation.	The requirements in this area (retro-commissioning) have been in development for three years and in regulation for almost one year. The need to implement is tied CIP eligibility, while the basis is improved energy performance.
Q11. How important is it to have all of these options available for compliance?	Not important; a single compliance tool could be established.	Thanks for your response.

PUBLIC COMMENT RECEIVED	PUBLIC COMMENT RECEIVED	DEED RESPONSE
<p>Q12. If you are a district facility manager or superintendent, which option are you most likely to use?</p> <p>Option 1 - Internal tools and assessments.</p> <p>Option 2 - State tools and assessments.</p> <p>Option 3 - EPA tools and EPA/State assessments.</p> <p>A combination of options (see comments).</p>	<p>Option 1 - Maybe</p> <p>Option 2 - Highly likely</p> <p>Option 3 - Somewhat unlikely</p> <p>A combination of options (see comments). Somewhat likely</p>	<p>Thanks for your response.</p>
<p>Q13. Do you have any final thoughts or comments on the implementation of this regulation?</p>	<p>Respondent skipped this question</p>	
<p>Q14. If you would like to receive a response to your survey answers please provide the following:</p>	<p>Respondent skipped this question</p>	

Direct Comments on Position Paper:

Item	Document Location	ASD Comment	DEED Response
1	Definitions, item 4	Supplied by DEED? NOAA? or do the districts need to purchase ASHRAE products? Available online for free acceptable?	Heating Degree Day information is available from government entities such as those you mentioned and from other websites. These are all acceptable sources.
2	Discussion	"commissioning" should be "retro/re-commissioning"	Agree; wording will be corrected to "retro-commissioning".
3	Retro-commissioning Need	Is above the benchmark	Agree; wording will be corrected to "when the EUI rises above the benchmark."
4	Retro-commissioning Need	This is not practical. As stated, commissioning is to have the facility operate as designed. Some designs are very efficient and some.... are severely lacking.	The ability for DEED to benchmark a climate-indexed EUI has been considered. By targeting newer facilities only, the variations you mention in energy performance may be sufficiently mitigated so as to permit development of this benchmark. If not, local, facility-specific benchmarks are acceptable provided they are developed with sound best-practice.
5	Retro-commissioning Effectiveness	Better, only 1,000%	We agree the cost ranges in the quoted study are broad but a median percentage can still be calculated and is likely to be useful.
6	Retro-commissioning Effectiveness	only a 1,500% spread	See above comment.
7	Retro-commissioning Effectiveness	Cute. :-). Just give the districts the ability to get quotes from providers.	This is certainly an option if you can get them to do it.
8	Regular Evaluation	EUI is, by definition, energy usage per square foot. Allow districts to monitor by utility and not require a combined EUI	Since this is part of a regulation that requires consumption monitoring of all utilities, we prefer to stay with that paradigm and the data should already be available.

9	RCx Target Facilities	How would use type be determined?	See the table note for more instructions on "Use type". For RCx there will be two use types "Main Schools" ('MS' in the DEED School Facility Database) and all other school and support facilities.
10	Options, Option 1 - District Tools/District Metrics	Or by energy component	See comment above. EUI by energy component will not be considered compliant.