

CEQA RULES FOR AGENCY ACTIONS AFFECTING CLIMATE CHANGE

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I. Introduction

State and local agencies in California have discretionary approval authority over a variety of actions and projects that have the potential to increase greenhouse gas ("GHG") emissions and contribute to climate change. Under the California Environmental Quality Act ("CEQA"),¹ state and local agencies are generally required to prepare an Environmental Impact Report ("EIR") so long as there is substantial evidence that a project approval may potentially have a significant adverse environmental effect.² If there is no substantial evidence of potential significant adverse effects, or if such anticipated effects can be mitigated to a level that renders them less than significant, CEQA permits a state or local agency to adopt a more limited document called a "Negative Declaration" (or "Mitigated Negative Declaration").³

If an EIR is required, CEQA provides that an EIR, *inter alia*, must identify whether each particular environmental effect from a proposed project is "significant," and must then identify all "feasible mitigation" for all environmental effects found to be "significant."⁴ If the EIR is unable to identify feasible mitigation to reduce all adverse environmental effects to "less than

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¹ Pub. Res. Code §21000 *et seq.*

² Pub. Res. Code §21080(d); 14 Cal. Code Regs §15064(f)(1).

³ Pub. Res. Code §21080(c); 14 Cal. Code Regs §15064(f)(2) and (3).

⁴ 14 Cal Code Regs. §§ 15126.2 and 15126.4.

significant" levels, CEQA then requires that a state or local agency adopt a "Statement of Overriding Considerations" before approving the underlying action/project.⁵

Many state and local agencies are now confronting the question of how CEQA's environmental assessment framework and rules work when applied to approvals that have the potential to increase GHG emissions and contribute to climate change. Answering this question has proved difficult, due to the current absence of CEQA statutory provisions, CEQA Guidelines⁶ or reported court decisions directly addressing the issue of what constitutes legally-adequate GHG emission analysis. While the Governor's Office of Planning and Research (OPR) attempted to address these issues in its June 19, 2008, Technical Advisory ("OPR Technical Advisory"), OPR mainly reiterated well-established principles of CEQA.⁷ Moreover, as discussed below, the OPR Technical Advisory fails to provide guidance on the most critical unresolved issue relating to GHG emissions analysis under CEQA, namely, the determination of significance.

This article identifies some of the CEQA compliance approaches that have been proposed to date to address state and local agency approvals having climate change impacts, and evaluates which of these approaches are likely to withstand judicial scrutiny.⁸

II. The Significant Question is the Question of Significance

In considering GHG emissions and climate change, there are a number of aspects to the CEQA environmental impact assessment process that are potentially implicated. A comprehensive review of all of these CEQA aspects is beyond the scope of the article, which

⁵ 14 Cal. Code Regs § 15093.

⁶ 14 Cal. Code Regs §§ 15000-15387.

⁷ See Governor's Office of Planning and Research, Technical Advisory, CEQA and Climate Change: Addressing Climate Change Through California Environmental Quality Act (CEQA) Review, dated June 19, 2008.

⁸ This article is current through June 19, 2008.

instead focuses on the one aspect that has proven the most difficult and thorny for state and local agencies: the determination of whether the proposed project will result in GHG emission increases that constitute a potential or actual significant adverse environmental impact. This significance determination is crucial because it serves as the basis for dictating whether an EIR or Negative Declaration should be prepared, whether an EIR must identify feasible mitigation to reduce the climate change impacts to less than significant, and whether a Statement of Overriding Considerations must be adopted if climate change impacts cannot be mitigated to less than significant levels.

There are in fact five distinct components to the significance analysis that need to be considered in the climate change context: (A) description of the environmental setting for GHG emissions/climate change; (B) identification of project-related activities that may affect GHG emissions; (C) quantification of GHG emission impacts for project-related activities; (D) determination of the significance of GHG emission increases resulting from a project; and (E) mitigation measures to reduce GHG emissions and climate change impacts.

A. Description of Environmental Setting for GHG Emissions/Climate Change

CEQA Guidelines Section 15125 requires that an EIR must describe the "environmental setting" (i.e. context) for a proposed project. This description assists the lead agency in establishing the baseline that it will use to determine whether a project's impacts are significant. Both the California Department of Justice ("Cal DOJ") and The Center for Biological Diversity ("CBD"), an environmental NGO active in GHG advocacy, have taken similar approaches in identifying the "environmental setting" for GHG analysis. The Cal DOJ has implicitly sanctioned the "environmental setting" description in various EIRs that included detailed descriptions of the background on climate change, including the international scientific

consensus that humans have contributed to greater GHG emissions, which in turn increase global warming, as well as data relating to California and area-specific impacts of global warming.⁹

In its report on CEQA and climate change, the CBD similarly stated that "[i]n order to assess a project's contribution to global warming, the EIR should provide an accurate and relevant summary of global warming and its impacts. The scientific literature on the impact of the greenhouse gas emissions on California (and the world) is well developed and can provide the context for this discussion. The summary should make a good faith effort at full disclosure and avoid minimizing or discounting the severity of global warming's impacts."¹⁰

B. Identification of Project-Related Activities That May Affect GHG Emissions

The quantification of a project's anticipated GHG emissions provides the basis for a comparison against the "baseline" to determine whether or not there is an increase and, if so, whether the "increase" should be considered "significant." To the extent an EIR fails to properly quantify the anticipated GHG emissions from a project, this in itself might constitute a violation of CEQA that could call into the question the legal credibility of the remainder of any GHG/climate change impact analysis.

CEQA requires a complete "project description" and does not permit piecemealing or segmentation of a larger integrated project into smaller discrete parts. The proper identification of all of the activities of a project (for purposes of the project description section of an EIR) will

⁹ See Comment Letter from Cal DOJ to Contra Costa County Planning Commission on Final EIR Prepared for Conoco Phillips Refinery Expansion Project (May 8, 2007); Comment Letter from Cal DOJ to City of Richmond on Draft EIR Prepared for Chevron Energy Project (July 9, 2007).

¹⁰ See Brian Nowicki, Kassie Siegel and Mathew Vespa, *The California Environmental Quality Act: On the Front Lines of California's Fight Against Global Warming* (paper prepared for October 2007 California State Bar Environmental Law Conference - original report dated September 2007), p. 5. In a footnote, the CBD report refers to GHG reports recently issued by the California Air Resources Board ("CARB") and the International Panel on Climate Change ("IPCC") for guidance, which are available at <http://www.climatechange.ca.gov>, and IPCC reports, which are available at <http://www.ipcc.ch/>.

provide the basis for identifying those project activities that may result in environmental impacts (including but not limited to GHG emission increases or reductions). As a leading CEQA treatise explains: "The adequacy of an EIR's project description . . . is closely linked to the adequacy of its analysis of significant environmental effects. Failure to include a significant component of the project in the EIR project description often results in a failure to analyze the impacts of that component."¹¹ Therefore, it is important to properly identify all of the aspects and components of a project.

CEQA Guidelines Section 15126.2(a) requires analysis of both direct and indirect project impacts that are likely to result from the project in both the short term and the **long term**.¹² For instance, in *El Dorado Union High School District v. City of Placerville* (1983) 144 Cal.App.3d 123, the Court of Appeal held that the increased school enrollment resulting from a proposed residential development would lead to the need to construct a new school, and that this was an indirect environmental effect of the residential project that should have been analyzed in the EIR. In this regard, it is also important to comply with Public Resources Code Section 21100(b)(5) and with CEQA Guidelines Section 15126.2(d) to identify growth inducing impacts of a project.¹³

C. Quantification of GHG Emission Impacts for Project-Related Activities

The fact that there may be some uncertainty under CEQA concerning how to establish a "significance" standard for GHG emission increases resulting from a particular project does not

¹¹ Stephen L. Kostka & Michael H. Zischke, *Practice Under the Environmental Quality Act*, § 13.11 (CEB 2006) ("Kostka & Zischke"); see also *Laurel Heights Improvement Association v. Regents of the University of California* (1988) 47 Cal.3d 376, 394 (EIR was required to consider proposed expansion of laboratory operations to occupy entire building although expansion had not yet been formally approved); *Santiago County Water District v. County of Orange* (1981) 118 Cal.App.3d 818 (EIR for sand and gravel operation inadequate because it did not describe facilities to be constructed to deliver water to mine).

¹² 14 Cal. Code Regs § 15126.2(a)(emphasis added).

¹³ Pub. Resources Code § 21100(b)(5); 14 Cal. Code Regs § 15126.2(a).

mean that an agency preparing an EIR is relieved of its obligation to make a credible effort to first "quantify" the GHG emissions increases from a particular project. While the CEQA Guidelines do not expressly require that all adverse environmental impacts of a project be quantified, caselaw has held that CEQA requires that an EIR evaluate environmental impacts to the extent that it is reasonably feasible to do so.¹⁴ Therefore, to the extent quantification of anticipated GHG emissions can be reasonably done based on established methodologies (i.e. to quantitatively forecast the amount of CO₂ and other GHGs released per project activities), the CEQA Guidelines and caselaw suggest that such quantification should be done and included in an EIR.

It should also be noted that, in at least one instance, the Cal DOJ has alleged that a CEQA document was inadequate due to its improper calculation of anticipated GHG emission increases resulting from a proposed project. In a January 23, 2008, letter to the San Joaquin Valley Air Pollution District commenting on a proposed CEQA Negative Declaration for a dairy farm expansion, the Cal DOJ stated:

[T]he Initial Study calculates the amount of methane and nitrous oxide (NO₂) produced by the Dairy before and after the expansion, and then calculates the net increase in emissions due to the expansion. However, it incorrectly adds the emissions from the liquid manure generated by the new cows to *both sides* of the equation. The result is that this significant source of emissions is simply eliminated from the calculation of net impacts.

State and local agencies preparing CEQA documents should take care to ensure that the administrative record squarely supports any proposed quantification of project-related GHG emissions increases.

¹⁴ See 14 Cal. Code Regs §§ 15144, 15147, 15151; see also *San Francisco Ecology Center v. City and County of San Francisco* (1975) 48 Cal.App.3d 584; *Big Rock Mesas Property Owners Association v. Board of Supervisors* (1977) 73 Cal.App.3d 218; *National Parks and Conservation Association v. County of Riverside* (1999) 71 Cal.App.4th 1341, 1364.

D. Determining the Significance of GHG Emission Increases Resulting from Project-Related Activities

Once the GHG emission increases resulting from a project have been quantified, the next step under CEQA is for the EIR to evaluate whether such quantified GHG emission increases are "significant" (i.e. whether the increases would have a significant adverse impact on climate change, global warming or GHG emission levels). From a CEQA standpoint, this "significance" determination has two particular consequences. First, as discussed in greater detail later in this article, CEQA requires identification of all "feasible mitigation" for significant adverse environmental impacts (down to a level such that a particular adverse environmental impact is not considered significant). Second, if an EIR determines that an otherwise significant adverse environmental impact cannot be reduced to a level of less-than-significant through "feasible mitigation" measures, then CEQA requires that the lead agency certifying the EIR adopt a "Statement of Overriding Conservations" setting forth the reasons why the proposed project should go forward notwithstanding that it is anticipated that the proposed project will have certain significant adverse environmental impacts.¹⁵

Section 21100(c) of CEQA provides: "The [EIR] **shall** also contain a statement briefly indicating the reasons for determining that various effects on the environment of a project are not significant and consequently have not been discussed in detail in the environmental impact report."¹⁶ Similarly, CEQA Guideline 15128 is titled "Effects Not Found to be Significant" and provides: "An EIR **shall** contain a statement briefly indicating the reasons that various possible significant effects of a project were determined not to be significant and were therefore not discussed in detail in the EIR."¹⁷ The wording of CEQA Guideline 15128 suggests that, absent

¹⁵ See Pub. Resources Code § 21100(c); 14 Cal Code Regs § 15128.

¹⁶ See Pub. Resources Code § 21100(c)(emphasis added).

¹⁷ See 14 Cal Code Regs § 15128(emphasis added).

a reasoned articulation as to why a particular adverse environmental effect should not be considered significant, detailed discussion of this effect is required.

It is important to note that CEQA Guidelines Section 15064.7 "encourages" agencies to adopt thresholds of significance for particular environmental effects, but does not "require" such adoption.¹⁸ Moreover, pursuant to CEQA Guideline 15064(b), an agency has discretion to adopt appropriate CEQA significance **standards** for particular environmental effects regardless of whether the agency formally adopts a "threshold of significance."¹⁹ CEQA Guidelines Section 15145 also discourages agencies from engaging in unsubstantiated speculation in EIRs.²⁰

Consistent with CEQA Guideline 15145, Guideline 15151 provides that "the sufficiency of an EIR is to be reviewed in the light of what **is reasonably feasible**" and that courts reviewing EIRs should look "not for perfection but for adequacy, completeness, and a good faith effort at full disclosure."²¹ In a similar vein, CEQA Guideline 15204 recommends that reviewers of EIRs "should be aware that the adequacy of an EIR is determined in terms of what is **reasonably feasible**."²² California court decisions have sometimes referred to the "reasonably feasible" standard set forth in CEQA Guidelines 15151 and 15204 as the "**rule of reason**" in reviewing the compliance of an EIR with CEQA's requirements.

There appear to be three primary proposed alternative methods for agencies to attempt to comply with CEQA in terms of the issue of significance determinations for anticipated GHG emission increases from a particular project: (1) not make a significance determination on the grounds that it is too speculative; (2) adopt a "Net-Zero" significance criterion that establishes

¹⁸ See 14 Cal Code Regs § 15064.7.

¹⁹ See 14 Cal Code Regs § 15064(b)(emphasis added).

²⁰ See 14 Cal Code Regs § 15145.

²¹ See 14 Cal Code Regs § 15151(emphasis added).

²² See 14 Cal Code Regs § 15204.

that *any* GHG emission increases are significant; and (3) adopt significance criteria for GHG emissions increases that provide that some increases are less-than-significant.

1. Not Making Significance Determination for GHG Emission Increases on Basis That Determination Would Be Too Speculative

Some commentators have suggested that it may be permissible under CEQA to refrain from making a determination as to whether GHG emission increases resulting from a project are significant or insignificant on the basis that such a determination would be too "speculative."²³ The commentators base their assertion on CEQA Guidelines Section 15145, the fact that there is no agency guidance on how to evaluate greenhouse gas emissions, and the California Supreme Court's decision in *Laurel Heights Improvements Association v. Regents* (1993) 6 Cal.4th 1112, 1137, where the Court upheld an agency's finding that determining the significance of the project-related air pollution impacts was too speculative due to the lack of an established methodology to quantify certain indirect project-related and cumulative air pollution emission increase.²⁴

While this approach has been adopted by some state and local agencies, it has been challenged in comment letters sent to those agencies by the Cal DOJ asserting that approach as a reason for the inadequacy of CEQA GHG/climate change analysis. Most notably, the Cal DOJ stated, "[w]hether or not the state or any agency ultimately adopts regulatory thresholds and or mitigation guidelines that would apply to this type of project, **the lack of official thresholds and guidelines does not absolve the County from the obligation under CEQA to determine the significance of, or adopt feasible mitigation for, the anticipated greenhouse gas emissions of**

²³ See Michael Zischke & Sarah Owsowitz, *Climate Change and the California Environmental Quality Act* (Paper Prepared for the annual California State Bar Environmental Law Section Conference, dated October 2007), pp. 4-6.

²⁴ See *Id.*

this project."²⁵ The Cal DOJ's position was also adopted by the California Air Pollution Control Officers Association ("CAPCOA") in its January 2008 Report: *CEQA & Climate Change: Evaluating and Addressing Greenhouse Gas Emissions from Projects Subject to the California Environmental Quality Act ("CAPCOA Report")*, as well as CBD.²⁶

For **three reasons**, it is quite uncertain whether a reviewing court would determine that the "too speculative to make a GHG/climate change significance determination" approach is compliant with CEQA. First, the California court decisions that have upheld terminating environmental impact analysis as "too speculative" took place in the context of the feasibility of being able to *quantify* particular adverse environmental impacts, rather than speculation about whether quantified adverse environmental impacts should be considered significant or insignificant.²⁷ As such, the existing reported CEQA California court decisions do not lend direct support to the position that speculation provides a proper basis to refrain from making a significance determination.

Second, the analysis of proponents of the "too speculative to make a GHG/climate change significance determination" approach does not appear to take full account of Section 21100(c) of CEQA and CEQA Guideline 15128, which both require lead agencies to establish whether a particular adverse environmental impact is not significant. This language is phrased in mandatory rather than discretionary terms, which may cause a reviewing court to take a particularly hard look at claims of unfeasibility.

²⁵ See Comment Letter from Cal DOJ to the Santa Barbara County Planning and Development Department (January 25, 2008); see also Comment Letter from Cal DOJ to Kern County Planning Department on Draft EIR for Proposed Corn Ethanol Plant (February 29, 2008); Comment Letter from Cal DOJ to the City of San Jose on the Draft EIR for the Coyote Valley Specific Plan (June 19, 2007); Comment Letter from Cal DOJ to City of Richmond on Draft EIR Prepared for Chevron Energy Project (July 9, 2007)(emphasis added).

²⁶ See *supra* note 10.

²⁷ See *supra* note 10; *Laurel Heights*, 6 Cal.4th at 1137.

Third, the analysis of proponents of the "too speculative to make a GHG/climate change significance determination" approach does not appear to consider the consequences to the CEQA regime of allowing a lead agency to refrain from making a significance determination for GHG emission increases resulting from a project, in that this may enable the lead agency to avoid altogether the evaluation of feasible mitigation measures related to GHG emissions, climate change and global warming. A reviewing court may find that this result is difficult to square with other California statutes and policies highlighting the pressing need to reduce GHG emissions, as well as courts' more general approach that CEQA is to be interpreted broadly in favor of more environmental protection.²⁸

As a related point, we also note that CEQA only authorizes the imposition of feasible mitigation for significant environmental effects. As such, a lead agency relying upon the "too speculative to make a GHG/climate change significance determination" is in the position of being unable to impose *any* climate change mitigation measures. Imposing such mitigation on the heels of a finding that climate change significance cannot be determined may be improper under CEQA (and could be challenged by the party against whom the mitigation measure is imposed).

2. Net Zero Significance Criteria for GHG Emission Increases

Some commentators have noted that, given scientific consensus emerging regarding the severity of the climate change/global warming problem, there may be difficulties in establishing significance criteria that provide a defensible legal basis for determining that even small additional GHG emission increases can be considered insignificant for CEQA purposes. For

²⁸ See generally *Valley Advocates v. City of Fresno* (2008) 160 Cal.App.4th 1039, 1070; *Friends of Mammoth v. Board of Supervisors* (1972) 8 Cal.3d 247, 259, disapproved on other grounds in *Kowis v. Howard* (1992) 3 Cal.4th 888, 896-897.

instance, Brian Nowicki, Kassie Siegel and Matthew Vespa comment in their October 2007 paper: "Because the [California] legislature has determined that California's current greenhouse gas baseline is so high that it requires significant reductions, and any additional emissions will exacerbate existing conditions, **it is difficult to see how a new source, even a small one, can be considered insignificant cumulatively.**"²⁹

This has led some to propose a Net Zero significance criterion (or threshold of significance) for GHG emission increases. The Net Zero approach was discussed in a June 2007 publication by the Association of Environmental Professionals ("AEP") titled *Alternative Approaches to Analyzing Greenhouse Gas Emissions and Global Climate Change in CEQA Documents* ("AEP Climate Change-CEQA Report"). Although it uses the term "threshold" somewhat more loosely than the term "thresholds of significance" as used in CEQA Guidelines Section 15064.7, the *AEP Climate Change-CEQA Report* explains:

The Quantitative Analysis with Net Zero threshold approach involves quantifying GHG emissions and using zero net carbon dioxide equivalent increase as the threshold. This approach would be useful where it can be demonstrated that a program or project results in zero GHG emissions, or otherwise does not contribute to climate change. **This approach would make most projects significant with regard to their cumulative contribution to GHG emissions.**³⁰

There is legal support for a Net Zero significance criterion for GHG emission increases and climate change. When dealing with an environmental impact that is already recognized as quite severe, even small contributions to such pre-existing conditions should generally be

²⁹ See *supra* note 10 (emphasis added).

³⁰ See Association of Environmental Professionals, *Alternative Approaches to Analyzing Greenhouse Gas Emissions and Global Climate Change in CEQA Documents* (June 2007)(emphasis added); see also California Air Pollution Control Officers Association, *CEQA & Climate Change: Evaluating and Addressing Greenhouse Gas Emissions from Projects Subject to the California Environmental Quality Act* (January 2008)(emphasis added).

considered significant.³¹ Consequently, given the growing body of scientific literature on the severity of climate change/global warming and on the direct contribution of GHG emissions to the climate change/global warming problem, and under cases holding that even a slight contribution to a pre-existing significant impact will generally be considered significant, a lead agency would likely be on very solid legal ground in adopting a Net Zero significance criterion for GHG emissions increases. Moreover, it is extremely unlikely that environmental groups or the Cal DOJ would challenge a lead agency's adoption of a Net Zero significance criterion for GHG emission increases, which would mean that the only potential challenge to the agency's adoption of such a criteria would come from interests/parties contending that the standard is "too environmentally stringent." Given the scientific literature on the climate change/global warming situation, and the fact that we have not located any reported CEQA court cases where significance criteria/threshold of significance relied upon in an EIR has been set aside on the grounds that it is "overly protective" of the environment, such a challenge does not seem particularly likely to succeed.

Although the Net Zero approach may be extremely defensible from a legal standpoint, it is important to keep in mind the consequences that such an approach would have under CEQA in regard to mitigation measures. If under the Net Zero significance criterion *any* additional GHG emissions from a project are to be considered significant, then it would follow under CEQA that an EIR must evaluate all feasible mitigation measures to reduce a project's GHG emissions down to zero.

³¹ See Kostka & Zischke, §13.49 – Determining Significance of Cumulative Impacts; *see also Kings County Farm Bureau v. City of Hanford* (1990) 221 Cal.App.3d 692, 718; *Los Angeles Unified School District v. City of Los Angeles* (1997) 58 Cal.App.4th 1019; *see also supra* note 10.

3. Significance Criteria for GHG Emission Increases That Defines Some Increases As Less-Than-Significant Impact on Climate Change

The third potential approach in terms the GHG significance determination is for an EIR to rely on significance criteria other than Net Zero. Presumably, the reason for a lead agency to rely on significance criteria other than Net Zero would be to allow for a determination that "some" GHG emission increases from a project can be properly considered "insignificant" for CEQA purposes, and that such insignificant GHG emission increases do not trigger CEQA's obligations regarding feasible mitigation measures.

In *Kings County Farm Bureau v. City of Hanford* and in *Los Angeles Unified School District v. City of Los Angeles*, the courts held that in areas where air quality is already seriously impaired and degraded any additional air pollution (no matter how small) will generally be considered a "significant" cumulative adverse environmental effect.³² In light of these holdings and in light of the mounting evidence of the severity of climate change conditions, there is a high degree of legal uncertainty in relying on significance criteria other than Net Zero. This is because, should the Cal DOJ or environmental groups oppose any such alternative significance criteria for GHG emission increases, the legal argument presented in support of such opposition is likely to be that given the extensive documentation regarding the existence and severity of climate change/global warming and GHG emissions contribution to the problem, any additional GHG emission increases (no matter how small) should be considered cumulatively significant.³³

Notwithstanding the potential legal vulnerability of GHG emission increase significance criteria other than Net Zero, there has nonetheless been discussion of the potential approach such alternative significance criteria might take. The most comprehensive current survey of such

³² See *supra* note 31.

³³ See CBD Comment Letter to South Coast Air Quality Management District on CAPCOA's Conceptual Approaches regarding Potential Significance Thresholds for Greenhouse Gas Emissions (April 17, 2008).

potential approaches is found in the *CAPCOA Report*. Chapter 7 of the *CAPCOA Report*, "CEQA with Non-Zero GHG Thresholds," outlines the possible use of a "business-as-usual" criteria for making project-related GHG emission significance determinations.³⁴ Under the proposed "business-as-usual" criteria, the anticipated GHG emissions of a new proposed project are compared against a similar project done in the past (and if the GHG emissions of the new proposed project are less than the GHG emission for similar projects done in the past, then the new project's GHG/climate change impacts would not be considered significant).

A significance criterion based on a comparison to "business-as-usual" (as described in Thresholds 1.1, 1.2 and 1.3 of the January 2008 CAPCOA report) might be particularly vulnerable to legal challenge in the absence of new CEQA statutory provisions expressly authorizing such criteria. More specifically, under existing CEQA law, it is unclear whether there would be substantial evidence to support the finding that a project's anticipated GHG emission increases will have a "less than significant" or "insignificant" impact on climate change so long as it can be established that these anticipated GHG emission increases are less than what they would have been for similar projects done in the past. This approach in effect adopts the GHG emission increases from older "business-as-usual" projects as the baseline for determining whether the anticipated GHG emission increases from proposed new similar projects will have a significant impact on climate change, and we are not aware of any CEQA Guidelines or reported court decisions that sanction the use of such an approach. The fact that the January 2008 CAPCOA report discusses Thresholds 1.1, 1.2 and 1.3 in the context of a section titled "Statutory or Executive Order Approach" suggests CAPCOA's view is that statutory revisions to CEQA

³⁴See *supra* note 30.

would likely be required before the proposed "business-as-usual" thresholds would be permissible.³⁵

E. Mitigation of Significant GHG/Climate Change Effects

In considering the application of the relevant CEQA provisions (CEQA Guidelines Sections 15091(a), 15093(b), 15126.4 and 15379) to the question of mitigation in the GHG/climate change context, there are two primary questions that arise. First, there is the question of determining what "quantity" of GHG emissions reductions (via mitigation) would be required to reduce a project's anticipated GHG emission increases down to a level that is less than significant (thereby avoiding the need to adopt a statement of overriding considerations pursuant to CEQA Guidelines Section 15093b). Second, there is the question of what "types" of mitigation are permissible under CEQA to mitigate a project's anticipated GHG emission increases and impacts on climate change and global warming. These two questions are considered separately below.

1. Quantifying the Mitigation Required to Reduce a Project's Climate Change Impacts to Less Than Significant

The answer to this question takes us back to the earlier discussion in this article relating to potential options under CEQA for determining the significance of GHG emission increases resulting from a proposed project. The particular approach selected by the lead agency as to significance criteria would, in turn, affect the manner in which quantification of mitigation was

³⁵ On a related note, CBD criticizes the CAPCOA Thresholds. *See supra* note 33. CBD notes that "[u]nder CAPCOA's own analysis, the only two thresholds that are highly effective at reducing emissions and highly consistent with AB 32 and Executive Order S-3-05 are a threshold of zero [Threshold 2.1] and a quantitative threshold designed to capture 90 percent or more of likely future discretionary projects (a 900-ton CO₂Eq threshold) [Threshold 2.2]. All other proposed thresholds are simply inadequate in light of severe environmental threats posed by global warming and California's emissions reduction mandates." *Id.* at p. 2-3. CBD then proceeds to reiterate its support of "a threshold of zero in order to ensure that new projects do not have a cumulatively significant impact on global warming." *Id.* at 4.

undertaken. For instance, if a lead agency were to adopt a Net-Zero significance criterion for GHG emissions, then the quantity of GHG emission reductions necessary to reduce a particular project's climate change impacts to less than significant would be the same quantity of GHG emission increases anticipated to result from the particular project. As another example, to the extent the lead agency were to adopt a significance criterion for GHG emissions that was related to a baseline established for similar older "business-as-usual" projects, then the quantity of GHG emission mitigation needed would be set in reference to the extent by which the projected project GHG emission increases from the project exceeded the business-as-usual increases (which would be viewed as the baseline).

2. Types of Mitigation Permissible Under CEQA to Mitigate a Project's GHG Emission Increases/Impacts on Climate Change

An EIR must propose mitigation measures that are designed to minimize the project's significant impacts by substantially reducing or avoiding them.³⁶ Courts generally defer to an agency's decision on the effectiveness of the mitigation measures proposed by an EIR.³⁷

(a) On-site Mitigation

On-site mitigation measures can include features incorporated into a project that reduce its GHG emissions and/or on-site measures that offset those emissions. Some commentators recommend that agencies first look at reducing the energy required by the project, then at measures to offset any remaining energy related emissions.³⁸ Some examples of on-site mitigation measures include: construction of energy-efficient buildings; minimizing and

³⁶ Kostka & Zischke, § 14.7 – Effectiveness of Proposed Mitigation Measures, citing Pub. Resources Code §§ 21002, 21100.

³⁷ *Id.* citing *Sacramento Old City Association v. City Council* (1991) 229 Cal.App.3d 1011, 1027.

³⁸ See generally *supra* notes 10, 30.

recycling construction-related waste; maximizing water conservation measures; and installation of solar systems to meet energy and hot water demands.³⁹

(b) Off-site Mitigation

Once all onsite mitigation measures have been undertaken to maximally avoid and reduce the project's greenhouse gas emissions, a lead agency may rely upon contributions to off-site mitigation programs for additional mitigation.⁴⁰ For instance, a project could contribute to a program that invests in biomass, wind power, solar power, alternative vehicle fuels, or increased energy efficiency programs. Alternatively, a project could offset GHG emissions by making a monetary contribution to a tree-planting program that would provide carbon sequestration over a reasonable period of time, commensurate with the planned life of the project. Substantial evidence should be presented to explain the rationale supporting selection of the measure, its duration, details on the selection, and a quantification of the GHG reduction, if available.⁴¹

An off-site mitigation approach may need to give the highest priority to offsets within California in order to contribute to state-wide greenhouse gas emissions reduction to help ensure that the offsets comply with California environmental laws and emission standards.⁴²

(1) Carbon Offset Credit Programs

Carbon offset credit programs are a type of off-site mitigation. There are two categories of carbon offset credit programs. The first is "carbon offsets," which are credits or certificates that represent the right to claim responsibility for greenhouse gas emission reductions.⁴³ For

³⁹ *Id.*

⁴⁰ *Id.*

⁴¹ See *supra* note 30.

⁴² See *supra* notes 10 and 30.

⁴³ See California Environmental Insider, *A.G. and State Legislator Seek Greater Controls Over Marketing of Carbon Offsets* (February 14, 2008).

example, a carbon offset provider might use proceeds to pay for a landfill methane collection system or tree planting effort that otherwise might not have occurred.⁴⁴ The second category of offsets is so-called Renewable Energy Credits (RECs). These represent that portion of the cost of a project to generate renewable energy that exceeds the cost of generating conventional energy. These are often generated by clean energy providers, who cannot recover the true costs of constructing and operating their power projects through sales in the conventional energy market. To account for this they sell the energy itself at the standard price for such energy, and market the differential in the form of a REC; RECs, however, are largely unregulated.⁴⁵

Last November the Federal Trade Commission announced its intent to begin an investigation into the validity of advertising claims made for both carbon offsets and RECs.⁴⁶ The Attorney General's Office and state Assemblyman Pedro Nava (D-Santa Barbara) have both weighed in on the need to place some controls over the fast growing business of selling carbon offsets to consumers and businesses. The response consists of proposed legislation that would establish a certification program for companies selling carbon offsets in California.⁴⁷

F. June 2008 OPR Technical Advisory

OPR's Technical Advisory was intended as an interim step in the development of formal CEQA Guidelines on the question of GHG emissions/climate change. While a full analysis of the OPR Technical Advisory is beyond the scope of this article, it appears the document does little more than reiterate many of the existing CEQA principles and analytic frameworks noted in this article. More specifically and somewhat disappointingly, the OPR Technical Advisory does not address the most controversial unresolved aspect of the CEQA GHG/climate change

⁴⁴ *Id.*

⁴⁵ *Id.*

⁴⁶ *Id.*

⁴⁷ *Id.*

analysis, the determination of significance. The OPR Technical Advisory states, “[a]lthough climate change is ultimately a cumulative impact, not every individual project that emits GHG must be found to contribute to a significant cumulative impact on the environment.”⁴⁸ OPR, however, does not offer any advice as to what methodology, evidence or legal authority a lead agency might lawfully rely upon to support such a conclusion.

III. Conclusion

Based on the foregoing, the requirements for the legally sufficient treatment of GHG emissions and climate change issues in CEQA documents are in the initial stages of development. Little statutory, regulatory or caselaw guidance yet exists. At some point more solid legal guidance may be available from the CEQA Guidelines, the state legislature, or the courts, but that could be several years from now. In the interim, a transparent acknowledgement of uncertainty coupled with best efforts at completing all aspects of the analysis CEQA demands is the most legally defensible course to follow.

⁴⁸ See *supra* note 7.