

Kilroy Realty Corporation

**PAS 2060: 2014 specification for the
demonstration of carbon neutrality**

**Qualifying explanatory statement in
support of PAS 2060:2014, Third Party Certification**

Achievement period: January 1, 2020 – December 31, 2020

Commitment period: January 1, 2020 – December 31, 2022

Introduction

This document forms the PAS 2060 Qualifying Explanatory Statement to demonstrate that Kilroy Realty Corporation has achieved carbon neutrality in accordance with PAS 2060:2014 at December 31, 2020 with commitment to maintain to December 31, 2022 for the period commencing January 1, 2020.

Commitment Summary

Carbon neutrality of KRC's Scope 1 and 2 emissions will be achieved by KRC in accordance with PAS 2060 for Calendar Year 2020, Third-party certified by DNV.

PAS 2060 Requirement	Response
Individual responsible for the evaluation and provision of data necessary for the substantiation of the declaration including that of preparing, substantiating, communicating and maintaining the declaration:	Sara Neff, sneff@kilroyrealty.com
Entity responsible for making the declaration:	Kilroy Realty Corporation
Identify the subject of the declaration	<p>Kilroy Realty Corporation (NYSE: KRC) is the subject of this declaration. KRC has earned global recognition for sustainability, building operations, innovation, and design. As pioneers and innovators in the creation of a more sustainable real estate industry, the company's approach to modern business environments helps drive creativity, productivity, and employee retention for some of the world's leading technology, entertainment, life science and business services companies.</p> <p>KRC is a publicly traded real estate investment trust ("REIT") and member of the S&P MidCap 400 Index with more than seven decades of experience developing, acquiring, and managing office and mixed-use projects.</p> <p>The activities material to the achievement of the carbon neutral declaration are primarily the operation and management of the company's stabilized portfolio, which totaled approximately 14.6 million square feet of primarily office and life science space that was 91.2% occupied and 94.3% leased. The company also had 808 residential units in Hollywood and San Diego, which had a quarterly average occupancy of 89.5% and 50.4%, respectively.</p>

Explain the rationale for the selection of the subject	KRC has long been an award-winning company regarding its environmental stewardship and carbon management. It has chosen to take its entire stabilized portfolio to carbon neutral operations to demonstrate the fact that a publicly traded REIT can in fact achieve carbon neutral operations, and that other REITs can do the same.
Define the boundaries of the subject	KRC has a major presence in San Diego, Greater Los Angeles, the San Francisco Bay Area, and the Pacific Northwest only. It has chosen the operational control approach to defining its carbon emissions. It has no subsidiaries or legal entities that are excluded from this declaration
Identify all characteristics (purposes, objectives or functionality) inherent to that subject	KRC's goal is to provide class A primarily office space to today's innovative tenants. It owns, manages and operates approximately 100 buildings on the west coast of the united states. Those buildings use natural gas and electricity for heating and cooling, as well as powering all of the equipment needed to run the buildings and any equipment/devices that the tenants install and use in those buildings.
Type of Conformity Assessment	I3P-3 Carbon neutrality of the 2020 Scope 1 and 2 emissions achieved by Kilroy Realty Corporation in accordance with PAS 2060 at December 31, 2020 with commitment to maintain this status for three years, until December 31, 2022, DNV certified
Baseline for the PAS 2060 Declaration	January 1, 2020 – December 31, 2020
First Qualifying Period	January 1, 2020 – December 31, 2020
Second Qualifying Period	January 1, 2021 – December 31, 2021
Third Qualifying Period	January 1, 2022 – December 31, 2022
Identify and take into consideration all activities material to the fulfilment, achievement or delivery of the purposes, objectives or functionality of the subject	The activities material to the fulfillment of KRC's objective to operate class A office buildings include running building equipment, providing 3 rd party services such as janitorial, security, and landscaping, and responding to tenant concerns.
Select an appropriate standard and methodology for defining the subject, the GHG emissions associated with that subject and the calculation of the carbon footprint for the defined subject	We use the WRI Greenhouse Gas Protocol to define our Scope 1 and market-based Scope 2 GHG emissions. ENERGY STAR Portfolio manager uses the WRI Greenhouse Gas Protocol to convert our electricity and gas consumption into MtCO ₂ e. In 2020, we believe that our Scope 1 emissions were 3,000 MtCO ₂ e and our market-based Scope 2 emissions were 0 MtCO ₂ e. More information about ENERGY STAR Portfolio Manager can be found here: https://portfoliomanager.energystar.gov/pdf/reference/Emissions.pdf . This methodology meets the PAS 2060 principles.

<p>Provide justification for the selection of the methodology chosen</p>	<p>ENERGY STAR portfolio manager is the real estate industry standard for converting electricity and natural gas consumption information into MtCO₂e. In Portfolio Manager, which follows the WRI Greenhouse Gas Protocol, emissions are calculated by multiplying site energy values by emissions factors. These factors incorporate the emissions of carbon dioxide, methane, and nitrous oxide to provide a single carbon dioxide equivalent number. Portfolio Manager uses custom factors for the U.S. and Canada, which are further regionalized to account for differences within each country. The GHG protocol is listed in PAS 2060 Annex C, Table C.1, and it is presumed to meet the principles set out in 6.1.2. More information about ENERGY STAR Portfolio Manager can be found here: https://portfoliomanager.energystar.gov/pdf/reference/Emissions.pdf</p> <p>The GHG protocol is listed in PAS 2060 Annex C, Table C.1, and it is presumed to meet the principles set out in 6.1.2.</p>
<p>Confirmation that the selected methodology was applied in accordance with its provisions and the principles set out in PAS 2060</p>	<p>The GHG protocol is listed in PAS 2060 Annex C, Table C.1, and it is presumed to meet the principles set out in 6.1.2.</p>

This Qualifying Explanatory Statement contains information pertaining to the subject's carbon neutrality. Any and all information herein is believed to be correct at the time of issue.

Description of Emissions

PAS 2060 Requirement	Response										
<p>Describe the actual types of GHG emissions, classification of emissions (Scope 1, 2 or 3) and size of carbon footprint of the subject exclusive of any purchases of carbon offsets</p>	<table border="1" data-bbox="646 338 1416 531"> <thead> <tr> <th></th> <th>2020 Emissions (MtCO₂e)</th> </tr> </thead> <tbody> <tr> <td>Scope 1</td> <td>3,000</td> </tr> <tr> <td>Scope 2 Market Based</td> <td>0</td> </tr> <tr> <td>Scope 3</td> <td>N/A</td> </tr> <tr> <td>Total KRC carbon footprint</td> <td>3,000</td> </tr> </tbody> </table> <p>We are excluding all of our scope 3 emissions from this declaration because of cost and technical feasibility barriers, and we will revisit our capacity to capture our scope 3 emissions at the end of our third year of this commitment.</p> <p>All greenhouse gases are included and have been converted into tCO₂e.</p>		2020 Emissions (MtCO ₂ e)	Scope 1	3,000	Scope 2 Market Based	0	Scope 3	N/A	Total KRC carbon footprint	3,000
	2020 Emissions (MtCO ₂ e)										
Scope 1	3,000										
Scope 2 Market Based	0										
Scope 3	N/A										
Total KRC carbon footprint	3,000										
<p>100% Scope 1 (direct) emissions relevant to the subject shall be included when determining the carbon footprint</p>	<p>Stationary combustion accounts for more than 99% of our Scope 1 emissions so we are not reporting on mobile combustion or fugitive emissions. Our fugitive emissions would come from refrigerant leakage but we did not have any significant refrigerant leaks in the baseline/qualifying year and estimate that fugitive emissions account for less than 1% of our Scope 1 emissions and can thus be excluded on this basis.</p>										
<p>100% Scope 2 (indirect) emissions relevant to the subject shall be included when determining the carbon footprint.</p>	<p>We confirm that we have included all Scope 2 emissions relevant to KRC.</p>										
<p>Where estimates of GHG emissions are used in the quantification of the subject carbon footprint (particularly when associated with scope 3 emissions) these shall be determined in a manner that precludes underestimation.</p>	<p>There are no estimates used for our Scope 1 Stationary Combustion or Scope 2 carbon emissions. Where it is unclear if a building is in our operational control, we assume that it is. Scope 3 emissions are not included in our scope.</p>										
<p>The quantified carbon footprint shall cover at least 95% of the emissions from the subject.</p>	<p>We confirm that the quantified carbon footprint covers more than 99% of our Scope 1 and 100% of our Scope 2 emissions. Our fugitive emissions would come from refrigerant leakage but we did not have any significant refrigerant leaks in the baseline/qualifying year and estimate that fugitive emissions account for less than 1% of our Scope 1 emissions and can thus be excluded on this basis.</p>										
<p>Where a single source contributes more than 50% of the total emissions, the 95%</p>	<p>There is no single source that contributes to more than 50% of the total emissions.</p>										

threshold applies to the remaining sources of emissions.	
Any exclusion and the reason for that exclusion shall be documented	Scope 3 emissions are excluded from our carbon neutrality claim. We will revisit carbon neutrality claims around our Scope 3 emissions when the three years of this commitment have been completed.

Definition of Boundaries

Explanation of Boundary	<p>The subject is the organization boundary with operational control regarding KRC Scope 1 and Scope 2 carbon emissions.</p> <p>We are making the Scope 1 and Scope 2 operations claim on all of KRC's operations and have not excluded any subsidiaries or other lines of business. Our core activities are electricity and natural gas consumption used to provide thermal comfort to tenants in office spaces.</p>
Type of Approach	Control
Organization or Specific Site/Location	Kilroy Realty Corporation is the subject and includes all locations in the United States, which is the only country in which KRC owns or operates buildings.
Product or Service	The subject is not a product or service.
Actual methods used to quantify GHG emissions (e.g. use of primary or secondary data), the measurement unit(s) applied, the period of application and the size of the resulting carbon footprint.	<p>We use primary data to calculate all of our stationary combustion, which account for more than 99% of our Scope 1 emissions, and for all of our Scope 2 emissions. These sources are the invoices provided to Kilroy by its utilities that state its natural gas and electricity consumption in its directly managed buildings. Directly managed buildings are those in which KRC directly pays for the electricity and gas consumption of the asset.</p> <p>We then provide these invoices to a third-party data provider, who inputs the data into ENERGY STAR Portfolio Manager (ESPM). ESPM then converts our electricity and natural gas data into MtCO2e emitted per calendar year in the following ways:</p> <p>Scope 1 Emissions</p> <p>To calculate direct GHG emissions, ESPM uses a default fuel analysis approach. It assumes fuel-specific factors for heating value, carbon content, carbon to CO2 ratio (12:44), and carbon oxidation factor (100%) for each fuel. While a default fuel analysis approach provides a straightforward estimation of direct CO2 emissions, estimating direct emissions of CH4, and N2O is much</p>

more complicated. Unlike CO₂ emissions, CH₄, and N₂O emissions depend not only upon fuel characteristics, but also on combustion technology (size, vintage, maintenance, and operation), combustion characteristics, usage of pollution control equipment, and ambient environmental conditions. Fortunately, as these direct emissions less than 1% of the GHG footprint of a building, fuel-specific, commercial sector factors for combustion technology, characteristics and controls are considered adequate to estimate CH₄, and N₂O emissions associated with on-site fuel consumption.

To calculate direct GHG emissions:

1. All billed or metered site energy consumption for each fuel is converted from native units to MBtu. Fuels that are delivered, billed, or measured in mass or volume units (i.e., cubic feet, tons, gallons) are converted to energy using standard heat content factors.
2. Total site energy for each fuel is multiplied by a single CO₂-equivalent factor that incorporates the reference global warming potential of each gas (CO₂=1, CH₄=25, and N₂O= 298). In the US, these factors are computed at the national level (each fuel has one factor).
3. Direct emissions are summed together across all fuels (e.g., oil, gas, etc.) and reported as a Direct Emissions Metric in Portfolio Manager.
4. Direct emissions are also added to the Total GHG Emissions.

Scope 2 Emissions

Portfolio Manager applies regional GHG factors to compute the GHGs associated with electric consumption. Unlike the default fuel approach for direct emissions and indirect emissions from district systems, the approach for electricity is based on measured power plant data from utility owners and operators. For the U.S., these regional factors are determined using EPA's Emissions & Generation Resource Integrated Database (eGRID).

To calculate indirect GHG emissions from electricity:

1. All billed or metered site energy consumption for each source is converted from native units to MBtu.
2. Total site energy for each source is multiplied by a single CO₂ equivalent factor that incorporates the contribution of CO₂, CH₄, and N₂O. In the U.S., these are regional factors according to the eGRID subregions.
3. Indirect emissions are also added to the Total GHG Emissions

Emission Factor Source Documents:


	<p>More information on the use of AR4 is available at https://www.epa.gov/climateleadership/center-corporate-climate-leadership-ghg-emission-factors-hub.</p> <p>Global Warming Potential: The 100 year global warming potential (GWP) of each greenhouse gas (CO2=1, CH4=25, and N2O= 298) compares the radiative forcing ability of each gas relative to CO2, which serves as the reference gas. 100-year GWPs from IPCC Fourth Assessment Report (AR4), 2007. www.ipcc.ch/ipccreports/assessments-reports.htm.</p> <p>Total GHG Emissions for reporting year 1 Jan 2020 to 31 Dec 2020.</p> <table border="1" data-bbox="630 701 1372 892"> <thead> <tr> <th></th> <th>2020 Emissions (MtCO2e)</th> </tr> </thead> <tbody> <tr> <td>Scope 1</td> <td>3,000</td> </tr> <tr> <td>Scope 2 Market Based</td> <td>0</td> </tr> <tr> <td>Scope 3</td> <td>N/A</td> </tr> <tr> <td>Total KRC Carbon Footprint</td> <td>3,000</td> </tr> </tbody> </table>		2020 Emissions (MtCO2e)	Scope 1	3,000	Scope 2 Market Based	0	Scope 3	N/A	Total KRC Carbon Footprint	3,000
	2020 Emissions (MtCO2e)										
Scope 1	3,000										
Scope 2 Market Based	0										
Scope 3	N/A										
Total KRC Carbon Footprint	3,000										
Exclusion of Scope 3 Emissions	Scope 3 emissions are excluded from our carbon neutrality claim because of cost and technical feasibility barriers. We will revisit carbon neutrality claims around our Scope 3 emissions when the three years of this commitment have been completed										
Documentation of all assumptions and calculations made in quantifying GHG emissions and in the selection or development of greenhouse gas emission factors.	<p>The ENERGY STAR portfolio manager tool uses the WRI Greenhouse Gas Protocol to conduct of our GHG emission calculations. A full explanation of their methodology, including their greenhouse gas emission factors, can be found here: https://portfoliomanager.energystar.gov/pdf/reference/Emissions.pdf</p> <p>Emission Factor Source Documents: More information on the use of AR4 is available at https://www.epa.gov/climateleadership/center-corporate-climate-leadership-ghg-emission-factors-hub.</p> <p>Global Warming Potential: The 100 year global warming potential (GWP) of each greenhouse gas (CO2=1, CH4=25, and N2O= 298) compares the radiative forcing ability of each gas relative to CO2, which serves as the reference gas. 100-year GWPs from IPCC Fourth Assessment Report (AR4), 2007. www.ipcc.ch/ipccreports/assessments-reports.htm.</p>										
Assessment of uncertainty and variability associated with defining boundaries and quantifying GHG emissions including the positive	We do not have any uncertainty or variability associated with defining boundaries and quantifying over 99% of our scope 1 (stationary combustion) and 100% of scope 2 GHG emissions, as this information comes directly from utility invoices and then										

<p>tolerances adopted in association with emission estimates.</p>	<p>converted to MtCO₂e in Energy Star Portfolio Manager. Our fugitive emissions would come from refrigerant leakage but we did not have any significant refrigerant leaks in the baseline/qualifying year and estimate that fugitive emissions account for less than 1% of our Scope 1 emissions and can thus be excluded on this basis.</p> <p>It is sometimes unclear if we have operational control over a building, for example if KRC controls some of the energy usage and the tenant controls another portion. In these cases, we opt to be conservative and assume that such assets are directly controlled if we control more than 50% of the energy meters. In addition, in our purchase of offsets we procured more than needed in order to provide a positive tolerance for our declaration.</p>
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Carbon Footprint Management Plan

PAS 2060 Requirement	Response
Statement of commitment to carbon neutrality for the defined subject	Carbon neutrality of KRC's Scope 1 and 2 emissions will be achieved by KRC in accordance with PAS 2060 for Calendar Year 2020, Third-party certified by DNV.
Baseline Date	January 1, 2020
First qualifying date	December 31, 2020
Second qualifying date	December 31, 2021
Third qualifying date	December 31, 2022
First Period	January 1, 2020-December 31, 2020
Second Period	January 1, 2021-December 31, 2021
Third Period	January 1, 2022-December 31, 2022
Specify targets for GHG reduction for the defined subject appropriate to the timescale	Our target is to fully address our Scope 1 and Scope 2 emissions for three years starting with calendar year 2020 per the schedule below. 2020 is the baseline year and 2021 is the first year we will apply for Scope 1 and Scope 2 neutrality status. Our plan is to achieve onsite reductions in our Scope 1 and Scope 2 emissions each year via implementing efficiency projects, retrofitting our buildings, disposing of inefficient assets and acquiring or stabilizing more efficient assets, and creating behavioral change among our building engineers and our tenants during the commitment period in addition to our procurement of offsets.
Document the planned means of achieving and maintaining GHG emissions reductions including assumptions made and any justification of the techniques and measures to be employed to reduce GHG emissions	We will achieve and maintain our GHG emissions reductions through ongoing energy efficiency projects, procurement of 100% renewable energy from our utilities where available, and ongoing installation of onsite solar production facilities. Our plan is to achieve onsite reductions in our Scope 1 and Scope 2 emissions each year via implementing efficiency projects focused on both natural gas and electricity, retrofitting our buildings, disposing of inefficient assets and acquiring or stabilizing more efficient assets, and creating behavioral change among our building engineers and our tenants during the commitment period in addition to our procurement of offsets.
Specify the offset strategy including an estimate of the quantity of GHG emissions to be	For any Scope 1 emissions we are unable to address via onsite energy efficiency efforts, we will procure Verra-certified offsets that will then be retired on our behalf. In 2020 we procured 3,099 VCUs for this purpose from the project MRMPL Wind Power Project, VCU serial number 6419-320374595-320377693-VCU-034-APX-IN-1-1781-01012013-31122013-0. The project is the generation of electricity from wind power by installation of 16 Wind


offset, the nature of the offsets and the likely number and type of credits	Turbine Generators (WTG) at Jaisalmer, Rajasthan. Each WTG has an installed capacity of 1.25 MW. The total installed capacity of the project is 20 MW. The purpose of the project is to produce power from clean source and to reduce the dependence on fossil fuels for energy requirements. Project proponent has signed a power purchase agreement (PPA) with “Jodhpur Vidyut Vitran Nigam Limited” (JVVNL) to export the electricity to local grid.
Implement a process for undertaking periodic assessments of performance against the Plan and for implementing corrective action to ensure targets are achieved	We will assess our performance annually at the same time that we assess prior year performance across all of our sustainability Key Performance Indicators. This assessment is conducted between January and April of each calendar year. We will take corrective action at that time if the targets have not been achieved.
Non-recurring events	Not applicable
Reductions delivered in the period immediately prior to the baseline date and not otherwise taken into account in any GHG emissions quantification:	
Period from which these reductions are to be included	Our baseline is calendar year 2020. There are no reductions delivered in any period prior to our baseline date not otherwise taken into account
Availability of Data and Consistency of Calculations	As there are no previous period reductions being taken into account, this is not applicable
Assessment of Prior Report Practices	As there are no previous period reductions being taken into account, this is not applicable
Record the number of times that the declaration of commitment has been renewed without declaration of achievement.	None

Type of conformity assessment	Independent third party certification; Our sustainability reports, including our carbon claims, are independently assured by DNV to a Limited level of Assurance. For years prior to 2021, DNV used Verisustain as the standard to which our sustainability report was assured and ISAE300 for Carbon Neutrality Claim.
Statements of validation where declarations of commitment to carbon neutrality are validated by a third party certifier or second party orga nizations	In Process for the following commitment 'Carbon neutrality of KRC's Scope 1 and 2 emissions will be achieved by KRC in accordance with PAS 2060 for Calendar Year 2020, Third-party certified by DNV.'
Signature of CEO	 April 7, 2021
Public location of QES	https://kilroyrealty.com/sites/default/files/KRCPAS2060QualifyingExplanatoryStatement.pdf
Update the QES to reflect changes and actions that could affect the validity of the declaration of commitment to carbon neutrality	This is our first year of issuance. We commit to updating our QES to reflect all material changes to our declaration of commitment to carbon neutrality for all of the qualifying periods included in this commitment.

Checklist for QES Supporting Declaration of Achievement of Carbon Neutrality

Standard and methodology use to determine its GHG emissions reduction	We use the WRI Greenhouse Gas Protocol to define our Scope 1 and market-based Scope 2 GHG emissions	
Methodology	The methodology used was applied in accordance with its provisions and the principles set out in PAS 2060.	
Justification for the selection of the methodologies chosen to quantify reductions in the carbon footprint, including all assumptions and calculations made and any assessments of uncertainty.	We believe we have chosen the methodology to quantify reductions in carbon footprint most typically applicable to real estate, and which have been acceptable to our third-party auditor in prior reporting years. We do not have any uncertainty related to 99% of our Scope 1 and 100% of our Scope 2 carbon emissions.	
Describe the means by which reductions have been achieved and any applicable assumptions or justifications	Reductions have been achieved through ongoing energy efficiency projects, procurement of 100% renewable energy from our utilities, and ongoing installation of onsite solar production facilities.	
Ensure that there has been no change to the definition of the subject	There has been no change to the definition of the subject.	
Describe the actual reductions achieved in absolute and intensity terms and as a percentage of the original carbon footprint.		2020 Emissions (Mt CO ₂ e)
	Scope 1	3,000
	Scope 2 Market Based	0
	Scope 3	N/A
	Total KRC Carbon Footprint	3,000
	<p>Our most recent assured GHG intensity was 3.3 kg CO₂e/sf and we now believe it is 0 kg CO₂e/sf.</p> <p>It is possible for our absolute emissions to increase while our GHG intensity decreases. This would happen where KRC acquired or stabilized an asset without also disposing of property of the same size or more in the reporting year. In that case, because our portfolio has grown in size, absolute emissions would increase. But, if the new property was highly efficient, then GHG intensity could decrease. KRC's portfolio has not changed in size more than 20% in the last decade and we do not anticipate that this scenario is likely.</p>	
Record the percentage economic growth rate for the given application period used as a threshold	Our annual Net Income at the end of calendar year 2019 was \$215,229,000 and in 2020 was \$207,293,000, a decrease of 3.7%.	

or recognizing reductions in intensity terms.	
Provide an explanation for circumstances where a GHG reduction in intensity terms is accompanied by an increase in absolute terms for the determined subject.	Not Applicable
Document the standard and methodology used to achieve carbon offset.	VCS Standard. Methodology: ACM0002
Document the quantity of GHG emissions credits and the type and nature of credits actually purchased including the number and type of credits used and the time period over which credits were generated including:	
Which GHG emissions have been offset.	Scope 1 emissions associated with stationary combustion (99% of Scope 1 emissions) and all Scope 2 emissions
The actual amount of carbon offset.	3099 Tonnes VCUs
The type of credits and projects involved	The VCU was procured from the project MRMPL Wind Power Project, VCU serial number 6419-320374595-320377693-VCU-034-APX-IN-1-1781-01012013-31122013-0. The project is the generation of electricity from wind power by installation of 16 Wind Turbine Generators (WTG) at Jaisalmer, Rajasthan. Each WTG has an installed capacity of 1.25 MW. The total installed capacity of the project is 20 MW. The purpose of the project is to produce power from clean source and to reduce the dependence on fossil fuels for energy requirements. Project proponent has signed a power purchase agreement (PPA) with "Jodhpur Vidyut Vitran Nigam Limited" (JVNL) to export the electricity to local grid.
Time period over which the credits have been generated.	January 1, 2020 – December 31, 2020
Rationale to support any retirement of credits in excess of 12 months including details of any legacy emission savings, taken into account	Not Applicable
Type of conformity assessment:	Independent third-party certification
Statements of validation where declarations of achievement of carbon	In Process

neutrality are validated by a third party certifier or second party organizations.	
Signature of CEO	 April 7, 2021
Public location of QES	https://kilroyrealty.com/sites/default/files/KRCPAS2060QualifyingExplanatoryStatement.pdf
Confirmations	We confirm that this declaration does not suggest a reduction which does not exist, either directly or by implication, is not presented in a manner which implies that the declaration is endorsed or certified by an independent third party organization when it is not, Is not likely to be misinterpreted or be misleading as a result of the omission of relevant facts, and is readily available to any interested party.