No. 10-174

In the Supreme Court of the United States

AMERICAN ELECTRIC POWER COMPANY, INC., ET AL., Petitioners.

v.

STATE OF CONNECTICUT, ET AL.,

Respondents.

On Writ of Certiorari to the United States Court of Appeals for the Second Circuit

BRIEF OF AMICI CURIAE UNITARIAN UNIVERSALIST MINISTRY FOR EARTH; THE UNITARIAN UNIVERSALIST ASSOCIATION; THE SHALOM CENTER; THE PROVINCE OF THE IMMACULATE CONCEPTION OF THE CONGREGATION OF THE MISSIONARY SISTERS OF THE IMMACULATE CONCEPTION; THE NEW EVANGELICAL PARTNERSHIP FOR THE COMMON GOOD; THE NATIONAL CATHOLIC RURAL LIFE CONFERENCE; THE MISSIONARY OBLATES OF MARY IMMACULATE; MARYKNOLL OFFICE FOR GLOBAL CONCERNS; THE JEWISH RECONSTRUCTIONIST FEDERATION; INTERFAITH POWER AND LIGHT; GENERAL SYNOD OF THE UNITED CHURCH OF CHRIST; THE FRANCISCAN ACTION NETWORK; THE COLUMBAN CENTER FOR ADVOCACY AND OUTREACH; AND CHURCH WORLD SERVICE IN SUPPORT OF RESPONDENTS AND URGING AFFIRMANCE OF THE DECISION BELOW

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IDENTITY AND INTEREST OF AMICI CURIAE

Amici curiae are fourteen faith-based organizations that are active participants in the ongoing attempt to respond to global climate change and have a strong interest in developing limits on greenhouse gases, which are the primary cause of global climate change.¹

Amici represent a broad spectrum of Catholic, Protestant, and Jewish communities. Although they differ on many matters of faith and policy, they are united in their concern about threats to the environment. They believe that human beings are stewards of God's Creation and that humans have a moral obligation to prevent and mitigate harm to the planet, to our fellow humans, and to all of God's creatures.

Amici have long been particularly concerned about the perils posed by global climate change. They believe it is a real, measurable, and growing phenomenon, not a hoax. They believe climate change is largely caused by human choices and actions, primarily the burning of fossil fuels, which causes the emission of greenhouse gases. They believe it is exacerbated by human selfishness and neglect, chiefly by the pursuit of profit by some and by the unwillingness of government to make hard choices. They believe that global climate change is an ever-increasing, ever-worsening problem,

¹ This brief has been filed with the written consent of the parties, which is on file with the Clerk of Court. Pursuant to Supreme Court Rule 37.6, *amici* affirm that no counsel for a party authored this brief in whole or in part, nor did any person or entity, other than *amici* and their counsel, make a monetary contribution to the preparation or submission of this brief.

and accept the consensus scientific projections of far more catastrophic effects in the future. *Amici* are also concerned that the effects of global climate change have fallen and will fall on the most vulnerable members of society, who are among the least able to protect themselves. For all these reasons, they believe that reversing global climate change is an imperative moral question for the human family and that prudence and the precautionary principle require urgent action – not more debate, temporizing, and delay.

Amici therefore submit this brief in support of the Plaintiff-Respondents and respectfully urge this Court to affirm the decision below. They believe that the States and the land trusts should be allowed to seek court-ordered limits on emissions of greenhouse gases by the large utilities who are the defendants in this case, particularly in the absence of any actual legal limits on the emissions from the utilities' existing facilities under the Clean Air Act.

The individual *amici curiae* are as follows.

Unitarian Universalist Ministry for Earth is a not-for-profit organization that works alongside the Unitarian Universalist Association and other Unitarian Universalist organizations to connect and inspire an active community of Unitarian Universalists for environmental justice, spiritual renewal, and shared reverence for our Earth home. Unitarian Universalist Ministry for Earth provides resources, encourages coordinated Unitarian Universalist advocacy and action, and helps congregations engage in meaningful environmental

justice partnerships. Climate change and its effects on the least privileged in our world is a high priority.

THE UNITARIAN UNIVERSALIST ASSOCIATION (UUA) is a religious association of more than 1.000 congregations in the United States and North America. It combines two traditions: the Universalists. who organized in 1793, and the Unitarians, who organized in 1825. They consolidated into the UUA in 1961. Through its democratic process, the UUA adopts resolutions consistent with its fundamental principles and purposes. Unitarian Universalism is a liberal religion with Jewish-Christian roots. It has no creed. It affirms the worth of human beings, advocates freedom of belief and the search for advancing truth, and tries to provide a warm, open, supportive community for people who believe that ethical living is supreme witness of religion. Unitarian Universalist spiritual values call us to act on the personal, local, and national levels to adopt practices that will reverse global warming/climate change, and to do so in ways that are just and equitable.

THE SHALOM CENTER is a religious organization that was established in 1983 and is dedicated to inspiring the Jewish community to greater attention and action on questions of peace and justice for the planet and all who dwell on it -- and as part of this effort, to making common cause with peace and justice advocates of all faiths. Addressing the global climate crisis is one of The Shalom Center's two major program priorities. The Center especially draws on Jewish and other religious teachings about shaping a sustainable society and works on these issues with special concern for those most vulnerable and most hurt as the climate crisis unfolds.

THE PROVINCE OF THE IMMACULATE CONCEPTION OF THE CONGREGATION OF THE MISSIONARY SISTERS OF THE IMMACULATE CONCEPTION is part of an international Franciscan missionary community which was founded in 1910 in Santarem, Brazil, which has a province located in the United States of America, and which lives in contemplative compassionate presence to all, especially the most needy, through creative action in the face of the suffering of God's people and the destruction of creation. Out of our belief that all is created by God, with our interconnection globally as a congregation and through our presence to those in need in Asia, Africa, Europe and North and South America, we recognize the ecological crisis that threatens our planet and that we are part of both the cause and the solution. We network with like-minded groups and movements supporting and participating in actions that transform this situation.

THE NEW EVANGELICAL PARTNERSHIP FOR THE COMMON GOOD (NEP) is a faith-based nonprofit which offers a renewed Christian public witness for the sake of the Gospel and the common good. NEP subscribes and endorses the Evangelical Climate Initiative, including its four principles: (1) human-induced climate change is real; (2) the consequences of climate change will be significant, and will hit the poor the hardest; (3) Christian moral convictions demand our response to the climate change problem; and (4) the need to act now is urgent. Governments, businesses, churches, and individuals all have a role to play in addressing climate change—starting now.

THE NATIONAL CATHOLIC RURAL LIFE CONFERENCE (NCRLC), founded in 1923, is an organization comprised of dedicated bishops, laity and

religious who are joined in a common effort to serve the rural church, rural people and their communities. NCRLC's mission is to apply the teachings of Jesus Christ for the social, economic, and spiritual development of rural America with responsibility for the care of God's creation. By providing spiritual, educational and advocacy assistance, NCRLC helps rural people shape their futures and lead lives of dignity. NCRLC has served as a prophetic voice for rural communities and for care of the land on which they depend. NCRLC believes that globalization and global environmental issues, including climate change, place even greater demands on NCRLC to fulfill its mission of supporting and empowering rural people. Therefore, NCRLC advocates for policies that will protect God's creation and God's children from the threat posed by climate change, which is already affecting the farmers and rural communities with which NCRLC works.

THE MISSIONARY OBLATES OF MARY IMMACULATE is an order founded in 1816 to serve the poor and needy in many different ways. From providing education for children in Haiti to sheltering tsunami victims of all faiths in Sri Lanka, their ministries are a testament to the profound effect God's love has on the communities they serve. Our congregation of more than 4,500 Missionary Oblates reaches out to the poor in the U.S. and 70 other countries worldwide. The Oblates believe climate change is under way already and that the urgency with which we must act becomes clearer with every new scientific study. As part of the religious community, the Oblates have been working hard to re-awaken a religious vision of the world as a living interconnected cosmos guided by the Spirit for the enjoyment and nurture of all creatures. The

Oblates have been active with other faith communities in urging policy makers to be open to that vision, to act quickly and effectively, and to take into consideration the impacts on those least able to cope, both in the United States and abroad.

MARYKNOLL OFFICE FOR GLOBAL CONCERNS was founded in 1997 to represent the Maryknoll Sisters (founded in 1912), the Maryknoll Fathers & Brothers (founded in 1911), and the Maryknoll Lay Missioners (founded in 1994) in educating for social, economic, and environmental justice, peace, and the integrity of creation. It is an extension of the work done by the Fathers and Brothers' Justice and Peace Office (established in 1974) and the Maryknoll Sisters' Office of Social Concerns (established in 1978). Maryknoll also is the popular name of the Catholic Foreign Mission Society of America (priests and brothers) and the Maryknoll Sisters of St. Dominic. Lay people have joined the Maryknoll family to carry out mission activity through the Maryknoll Lay Missioners and the Maryknoll Affiliates. Maryknoll trains, recruits and supports missioners serving in more than thirty countries in Latin America, Asia and the Pacific, Africa and the Middle East. The Office for Global Concerns brings Maryknoll experience into important debates about public policy in the U.S. and other governments, United Nations, World Bank, and International Monetary Fund, and the corporate world. The Office informs advocacy and action for social, economic, and environmental justice, peace, and the integrity of creation.

THE JEWISH RECONSTRUCTIONIST FEDERATION (JRF) was founded in 1955 to represent the Reconstructionist movement nationally and

internationally and serves over 100 congregations and havurot across North America. We believe the religious imperative for environmentalism is be rooted in central tenets of Jewish tradition, which include cherishing and protecting the natural environment. JRF is a proud supporter of the Jewish Climate Change initiative, which fosters collaboration between all Jewish movements and Jewish national agencies and environmental organizations, and JRF endorses the JCC Pledge which aims to build a more sustainable global economy, support the creation of green jobs, prioritize protecting vulnerable populations, and ensure that the UN Climate Change Conference creates the strongest possible framework to ameliorate climate change.

INTERFAITH POWER AND LIGHT was created in 1998 and today represents over 10,000 congregations of many faiths across the United States who are concerned about global warming. We believe that global warming is one of the biggest threats facing humanity today. The very existence of life—life that religious people are called to protect—is jeopardized by our continued dependency on fossil fuels for energy. Every mainstream religion has a mandate to care for creation. We were given natural resources to sustain us, but we were also given the responsibility to act as good stewards and preserve life for future generations.

GENERAL SYNOD OF THE UNITED CHURCH OF CHRIST is the representative body of the national setting of the United Church of Christ (UCC) and is composed of delegates chosen by its Conferences, from member churches, voting members of Boards of Directors of Covenanted Ministries who have been elected by General synod as described in the Bylaws of

the UCC, and of ex officio delegates. The UCC was formed in 1957, by the union of the Evangelical and Reformed Church and the General Council of the Congregational Christian Churches of the United States in order to express more fully the oneness in Christ of the churches composing it, to make more effective their common witness in Christ, and to serve God's people in the world. The UCC has 5,600 churches in the United States, with a membership of approximately 1.2 million. The General Synod of the UCC, various settings of the UCC, and its predecessor denominations, have a heritage of concern for the environment and all of God's creation. At its 26th gathering in 2007 and 27th gathering in 2009, the General Synod expressed in part profound concern for the pending environmental, economic, and social tragedies threatened by global warming, to creation, human communities and traditional sacred spaces and, among other things, urged the United States, state and local governments to respond to global warming with great urgency and firm leadership.

THE FRANCISCAN ACTION NETWORK brings a U.S.-based Franciscan perspective of integral social transformation to public discourse and policies arising from Washington, DC. FAN engages Franciscan and Franciscan-hearted persons in the U.S. on issues of peacemaking, care for creation, poverty, and human rights. The Network believes that global climate change is an issue for people of faith because honoring creation is another way to honor God who created all that is, and that the human contribution to climate change represents one of the clearest examples of how human activity can be damaging to God's creation.

THE COLUMBAN CENTER FOR ADVOCACY AND OUTREACH (CCAO) promotes the social justice priorities of the U.S. region of the Missionary Society of St. Columban (a.k.a., St. Columban's Foreign Mission Society, a.k.a., Columban Fathers). The CCAO represents Columban missionaries: Catholic men and women who work with and serve those who are poor in fifteen countries worldwide, as well as communities in the United States. Through advocacy, solidarity, and education, the CCAO is dedicated to raising the peace, social justice and ecological concerns of Columban missionaries and the people with whom they live and serve. Although the CCAO recognizes the wide variety of social justice and economic ills facing our global community, the organization focuses primarily on climate change, migration and immigration, economic justice, and peace and reconciliation. We also recognize the growing synthesis of our issues (especially climate and migration), and believe human-induced climate change is the most serious and pressing ecological challenge facing the U.S. and the world today. The CCAO is guided by principles of justice, stewardship, and sustainability, recognizes sufficiency, interconnectedness of all life and the call to share in the act of Creation by responsibly caring for the world. and calls for comprehensive, mandatory, aggressive reductions in carbon emissions.

CHURCH WORLD SERVICE (CWS), founded in 1946, is a cooperative ministry of 37 Protestant, Orthodox, and Anglican denominations and communions, providing sustainable self-help and development, disaster relief, and refugee assistance around the world. The CWS connection to partners around the world informs and inspires its work in education and advocacy -- both of which are essential components as

for confronting the root causes of hunger. By raising awareness about hunger, poverty, water access, trade, human rights, climate change, peace-building and other issues in our Speak Out alerts, CWS brings the voices and priorities of our partners and constituents into the halls of churches, community groups, and governments. In the area of climate change, for example, CWS is working shoulder-to-shoulder with environmental organizations and other church-related relief and development agencies to promote policies that strive for equitable solutions to the challenges ahead.

INTRODUCTION AND SUMMARY OF ARGUMENT

As a source of actual and potential grievous harm, anthropogenic climate change stands out in the long history of humanity's affronts to our fellow humans and to our environment. A warming climate has caused and will cause or aggravate a host of "natural" disasters, such as shrinking glaciers, rising seas, more frequent and more intense hurricanes, wider and longer droughts, greater floods, increasing food prices and food shortages, disease epidemics, and wildfires. These disasters have consequences for the whole of humanity, and fall with particular unfairness on the poor, the sick, and the elderly.

Humans substantially cause global climate change through the burning of fossil fuels and humans are the only earthly force that can mitigate the swelling climate crisis. Although restraining and ultimately reversing global climate change will require many skills, what is needed most of all is moral vision. Resources of human character and spirit — love of life,

far-sightedness, solidarity — are needed to awaken a sufficient sense of urgency and resolve. Prudence and "the precautionary principle" compel urgent action, including the court-ordered limits on emissions sought by the Plaintiff-Respondents. For these reasons, *amici* urge this Court to affirm the decision below.

ARGUMENT

I. GLOBAL CLIMATE CHANGE IS A GRAVE AND UNPARALLELED THREAT TO GOD'S CREATION

Amici have submitted this brief to help establish that global climate change is an immense and growing problem, that human activity is the major cause, and that its current and future effects are insidious, long lasting, and often catastrophic. These effects include rising sea levels, shrinking glaciers and ice packs, torrential rains, floods, hurricanes, droughts, wildfires and water shortages, rising food prices and growing food shortages, epidemics of old and new diseases, and mass starvation and mass migrations.

Amici's concern about global climate change is not a new position for them or other members of the religious community. Reverence for God's Creation, and concern about human despoliation, date back to the Bible.²

² The National Religious Partnership on the Environment (NRPE) (an umbrella organization to which many of the *amici* belong and which like them urges action on climate change) has helpfully collected passages from "ancient texts that speak to the new responsibilities born of our unprecedented powers over creation. Well-known and well-loved stories — the Creation, the Garden of Eden, Noah's Ark, Job hearing the voice in the whirlwind —

For these reasons, *amici* and many of their coreligionists have long been concerned about the extent, origins, and consequences of global climate change. Seven years ago, more than a dozen of the nation's religious leaders³ issued a joint statement "shar[ing]"

acquire striking new dimensions of relevance to our times." NRPE, Why is the Environment a Religious Concern: The Environment in the Jewish and Christian Scriptures, available at http://nrpe.org/why/scripture01.htm. Specifically, NRPE reprises relevant passages from the Old and New Testaments that explicitly or implicitly impart environmental teachings. These include passages on the seven days of creation (Genesis 1:1-2:4a), Noah and the flood (Genesis 6:9a-14, 17-22; 7:11-14, 18-19, 21; 7:23b-8:3; 8:15-19); Adam and Eve in the Garden of Eden (Genesis 2:7-9, 15); God's covenant with the earth (Genesis 9:12-15); the Sabbath commandment and creation (Exodus 20:8-11); against wanton destruction (Deuteronomy 20:19-20); protecting species (Deuteronomy 22:6-7); Precaution (Deuteronomy 22:8); mysteries of creation (Job 38:25-27, 39:1-4); limits to human dominion (Job 39:9-12); the earth is God's (Psalm 24:1-2); let the earth rejoice (Psalm 96:11-13); creation suffers from human sin (Jeremiah 4:23-26, 12:4); God's care for creation (Matthew 6:25-30); Jesus' example of dominion as service (Matthew 20:25-28); The Word in creation and incarnation (John 1:1-14); Creation reveals God (Romans 1:20a); Creation waits for redemption (Romans 8:19-23); Christ and creation (Colossians 1:15-20); God the Creator (Revelation 4:11); destroying those who destroy the earth (Revelation 11:18); and New Heaven and New Earth (Revelation 21:1-2, 22:1-2). See also Isaiah 24:4-6 ("The earth dries up and withers, the world languishes and withers; the heavens languish together with the earth. The earth lies polluted under its inhabitants; for they have transgressed laws, violated the statutes, broken the everlasting covenant. Therefore a curse devours the earth, and its inhabitants suffer for their guilt.") (New Revised Standard translation).

³ Those leaders included the President of the National Council of Churches U.S.A., the Archbishop of Washington, D.C. and Chairman of the Domestic Policy Committee of the United States

their "deep conviction that global climate change presents an unprecedented threat to the integrity of life on Earth" and warning that "[a]mong the predicted consequences of climate change are more frequent occurrences of heat waves, drought, torrential rains, and floods; global sea level rise of between one-half and three feet; increase of tropical diseases in now-temperate regions; significant reduction in biodiversity." National Religious Partnership on the Environment (NRPE), Interfaith Perspectives on Climate and Air: Earth's Climate Embraces Us All 1 (May 2004), available at http://www.nrpe.org/issues/i_air/air_interfaith01.htm.

Four years ago, Pope Benedict XVI also embraced this scientific consensus: "[p]reservation of the environment, promotion of sustainable development and particular attention to climate change are matters of grave concern," because "[w]ith increasing clarity scientific research demonstrates that the impact of human actions in any one place or region can have worldwide effects." Letter of His Holiness Benedict XVI to the Ecumenical Patriarch of Constantinople on

Catholic Conference of Bishops, the General Secretary of the American Baptist Churches in the U.S.A., the Chancellor of the Jewish Theological Seminary of America, the Presiding Bishop of the Evangelical Lutheran Church in America, the Stated Clerk of the Presbyterian Church U.S.A., the Executive Director of Jewish Council for Public Affairs, the Vice President for Governmental Affairs of the National Association of Evangelicals, the Presiding Bishop and Primate of the Episcopal Church, U.S.A., the Interim General Secretary of the Council of Bishops of the United Methodist Church, the Ecumenical Officer of the Greek Orthodox Archdiocese of America, and the President of the Union for Reformed Judaism. The religious leaders were joined by a number of leading American scientists, included two Nobel Prize winners.

the Occasion of the Seventh Symposium of the Religion, Science and the Environment Movement (September 1, 2007), available at http://www.vatican.va/holy_father/benedict_xvi/letters/2007/documents/hf_ben-xvi_let_20070901_symposium-environment_en.html.

Even more now than when these statements were made, no reasonable observer can doubt that global climate change is a real, immense, and growing problem and that human behavior is the major cause. The overwhelming scientific evidence is that the Earth has been and is rapidly warming, and this warming is dramatically altering the globe's climate.⁴ Natural climate variability alone cannot explain these trends.

Leading scientific institutions in the United States and the world – including the National Academy of Sciences, the National Academy of Engineering, the National Academy of Medicine, and the National Research Council,⁵ as well as the prestigious

⁴ The phrase "climate change" is growing in preferred use to "global warming" because it helps convey that there are changes in addition to rising temperatures.

⁵ The National Academies are honorary, nongovernment, and nonprofit organizations that were established to provide independent scientific and technological advice to the U.S. government and nation. The National Research Council (NRC) is the operating arm that conducts the bulk of the Academies' science policy and technical work. The Academies and the NRC enlist committees of the nation's top scientists, engineers, and other experts--all of whom volunteer their time to study specific concerns.

Intergovernmental Panel on Climate Change (IPCC)⁶ -- have reached a rare consensus: the overwhelming and unequivocal body of scientific evidence is that the earth is rapidly warming and the climate is dramatically changing. This change is "now evident from observations of increases in global average air and ocean temperatures, widespread melting of snow and ice and rising global average sea level." Intergovernmental Panel on Climate Change, FOURTH Assessment Report: Observed Changes in Climate TheirEffects1 (2007), *available* http://www.ipcc.ch/publications and data/ar4/syr/en/ spms1.html. The average global temperature has "already risen 1.4°F since the start of the 20th century - with much of this warming occurring in just the last 30 years – and temperatures will likely rise at least another 2°F, and possibly more that 11°F, over the next 100 years." National Academies of Science, Engineering, and Medicine, Understanding and Responding to Climate Change (URCC) 2 (2008 ed.), available at http://dels-old.nas.edu/dels/rpt_briefs/ climate change 2008 final.pdf. By comparison, at the depths of the last ice age, 20,000 years ago, the average global temperature of the Earth was only 7°F to 11°F cooler than today. Joint Appendix 83.

In 2007, when the IPCC published its most recent Report, "[e]leven of the last twelve years (1995-2006) rank[ed] among the twelve warmest years in the

⁶ According to the National Academies, IPCC Reports "are considered the most authoritative source for information on the 'state of the science' on climate change." National Academies of Science, Engineering, and Medicine, *Ecological Impacts of Climate Change* (EICC) 2 (2009), *available at* http://delsold.nas.edu/dels/rpt_briefs/ ecological_impacts.pdf.

instrumental record of global surface temperature since (1850). . . . The temperature increase is widespread over the globe and is greater at higher northern latitudes" IPCC, FOURTH ASSESSMENT REPORT, *supra*, at 1.

Although the future is impossible to predict with compete certainty, The National Academies and the IPCC report that, under a "business as usual" scenario, "average global surface temperatures will likely rise by an additional 2.0–11 degrees Fahrenheit (1.1–6.4 degrees Celsius) by 2100. This temperature increase will be accompanied by a host of other environmental changes, such as an increase in global sea level of between 0.59 and 1.94 feet (0.18 and 0.59 meters)." National Academies of Science, Engineering, and Medicine, Ecological Impacts of Climate Change (EICC) 8 (2009), available at http://dels-old.nas.edu/ dels/rpt_briefs/ecological_impacts.pdf. The scientific consensus clearly points to human activity as the cause of climate change. According to the National Academies' most recent report, "there is a strong, credible body of evidence, based on multiple lines of research, documenting . . . that these [climate] changes are in large part caused by human activities." National Academies of Science, Engineering, and Medicine, Board on Atmospheric Sciences and Climate, Advancing the Science of Climate Change: Summary 1 (2010), available at http://books.nap.edu/ openbook.php?record id=12782&page=1. See National Academies, *EICC*, *supra*, at 3. In fact, "it is very likely that most of the observed warming over the past 50 years is the result of increased greenhouse gases

generated by human activities." National Academies, *EICC*, *supra*, at 5.7

The consequences of climate change are numerous and terrifying. These include:

• Sea level increases. "Global average sea level has risen since 1961 at an average rate of 1.8 mm/year and since 1993 at 3.1 mm/year, with contributions from thermal expansion, melting glaciers and ice caps, and the polar ice sheets." IPCC, FOURTH ASSESSMENT REPORT, supra, at 1. Id. Thus, "[s]atellite data since 1978 show that annual average Arctic sea ice extent has shrunk by 2.7% per decade, with larger decreases in summer of 7.4% per decade. Mountain glaciers and snow cover on average have declined in both hemispheres." Id. Under

⁷ In addition, eighteen of the Nation's most prestigious scientific institutions—led by the American Association for the Advancement of Science (AAAS), the American Geophysical Union, and the American Meteorological Society—presented Congress with "the consensus scientific view" that "climate change is occurring and rigorous scientific research demonstrates that the greenhouse gases emitted by human activities are the primary driver." AAAS, et al., Statement on Climate Change (Oct. 21, 2009), available at http://www.ucsusa.org/assets/documents/ ssi/climate-change-statement-from.pdf. The national academies of science of the world's 13 largest and most sophisticated economies also have issued a joint statement reflecting the overwhelming consensus that "[t]he need for urgent action to address climate change is now indisputable," and that "climate change is happening even faster than previously estimated." G8+5 Academies' Joint Statement: Climate Change and the Transformation of Energy Technologies for a Low Carbon Future (May 2009), available at http://www.nationalacademies.org/ includes/G8+5energy-climate09.pdf.

a "business-as-usual" GHG emissions scenario, sea levels could rise two feet or more by 2100 compared to 1990 levels. National Academies, *EICC* at 6.

- Diminished snowpack. The ancient seasonal rhythms of streams and rivers have changed as winter precipitation falls increasingly as rain instead of snow, and as earlier spring temperatures cause snow in the mountains to melt earlier and faster. Consequently, some areas experience more days with very heavy rain, while others face more frequent, intense, long-lasting droughts. temperatures also mean higher evaporation rates and thirstier plants and people, which increase demands for water. *Id.* In addition, diminished snowpack threatens the water supplies of people who depend on water from the seasonal melting of mountain ice and snow.
- Extreme temperatures and wildfires. Average temperatures are rising, but extreme temperatures are rising even more: in recent decades, cold days and nights have grown less frequent and hot days and nights more frequent, with more frequent heat waves and hotter high temperature extremes. Id. at 7. In the United States, "[m]any types of extreme weather events, such as heat waves and regional droughts, have become more frequent and intense during the past 40 to 50 years." U.S. Army Corps of Engineers, After Action Report: May 2010 Flood Event Cumberland River Basin, (July 21, 2010), available at http://www.lrn.usace.army.mil/LRN_pdf/AAR_

May_2010_Flood_Cumberland_Draft_V7_21.P df. More severe drought in some areas, combined with other factors, has contributed to larger and more frequent wildfires. National Academies, *EICC* at 7.

- Storms/hurricanes. Rising GHG emissions and the accompanying increases in the average temperatures of the earth have caused extreme weather events, such as hurricanes, to increase in frequency and intensity in recent years, and this trend will continue in the future, with serious impacts on human societies and the natural world. T.R. Knutson, et al., Tropical cyclones and climate change, 3 NATURE GEOSCIENCE 157, 158 (2010).
- Salination of drinking water. Global climate change will affect the quality of drinking water and impact public health. As sea level rises, saltwater will infiltrate coastal freshwater resources. Flooding and heavy rainfall may overwhelm local water infrastructure and increase the level of sediment and contaminants in the water supply. Pew Center on Global Climate Change, Climate Change 101: Science and Impacts 6 (January 2011), available at http://www.pewclimate.org/docUploads/climate e101-science.pdf (citations omitted).
- Spread of disease. Scientists expect climate change to affect human health in various other ways as well, both directly—from heat waves, floods, and storms—and indirectly—by increasing smog and ozone in cities, contributing to the spread of infectious diseases,

and reducing the availability and quality of food and water. The U.S. Centers for Disease Control and Prevention (CDC) maintains that global climate change has "the potential to affect human health in several direct and indirect ways, some of them severe." The U.S. Centers for Disease Control and Prevention, *Climate Change and Public Health* 1 (November 29, 2010), *available at* http://www.cdc.gov/climatechange/effects/default.htm.

• Species loss. Entire ecosystems are shifting toward the poles and to higher altitudes. Spring events, like the budding of leaves and migration of birds, are occurring earlier in the year. The risks to species will increase with increasing temperatures; scientists say that an additional 2°F of warming will increase the risk of extinction for up to 30 percent of all species. Pew Center, Climate Change 101: Science and Impacts, supra at 6.

II. JUSTICE AND MORALITY DEMAND AN URGENT RESPONSE TO GLOBAL CLIMATE CHANGE

The specter of global climate change extends beyond the plants and animals for which we are asked to be stewards. Unchecked climate change promises widespread dislocation and suffering for humanity. These effects are tragedies in the making, and crucially, tragedies of our own making. They are also contrary to basic Judeo-Christian ethics, which preach love of our fellow humans as ourselves, and more particularly, care and compassion for those who are the most vulnerable or needy. It is unfair to impose

these burdens on these innocent but vulnerable populations.⁸

As the National Religious Partnership on the Environment has observed, "protection of the weak" is a "universal value," and makes global warming "a universal moral challenge." NRPE, Interfaith Perspectives on Climate, supra. A similar sentiment has been embraced by the United States Conference of Catholic Bishops (USCCB), which has said that climate change "is about the future of God's creation and the one human family." USCCB, Global Climate Change: A Plea for Dialogue, Prudence, and the Good (2001), available Commonhttp://www.usccb.org/sdwp/international/globalclima te.shtml. More recently, Pope Benedict XVI has emphasized "the ethical implications" of climate change and other forms of environmental degradation. As the Pope has pointed out, such harms have consequences beyond "an immediate area . . . [and] always harm human coexistence, and thus betray human dignity." Letter of Pope Benedict XVI to the Ecumenical Patriarch of Constantinople, supra. Other religious leaders have expressed similar views.9

⁸ *Amici* take no position in this brief on whether any persons other than the Plaintiff-Respondents should have standing to pursue claims based on climate change.

⁹ See, e.g., The Evangelical Climate Initiative, Climate Change: An Evangelical Call to Action 6 (Jan. 2006), available at http://preview.christiansandclimate.org/wp-content/uploads/2008/05/eci-calltoaction-booklet.pdf ("moral convictions demand our response to the climate change problem); Coalition on the Environment and Jewish Life (COEJL), Climate Change Programs, available at http://www.coejl.org/~coejlor/climatechange/index.php ("[a]ddressing climate change is a clear

Defendant-Petitioners and their *amici* essentially argue that this Court should, as a matter of prudence, wait for other branches of government to address climate change. They misunderstand the concept. The religious *amici*, in line with many other religious leaders, believe that, in these exigent circumstances, prudence imposes a moral duty to act – specifically, to act to prevent harm.

This theme has been emphasized by a broad spectrum of religious leaders. For example, Pope Benedict XVI has made it clear that, where "protection of the environment" is concerned, "[p]rudence does not mean failing to accept responsibilities and postponing decisions." Pope Benedict XVI, Message for the Celebration of the World Day of Peace (Jan. 1, 2008), availableathttp://www.vatican.va/holy father/benedict xvi/messages/peace/documents/hf b en-xvi mes 20071208 xli-world-day-peace en.html (emphasis added). The Pope has also emphasized that it should be morally impossible to "remain indifferent before the problems associated with such realities as climate change." Id. Protestant and Jewish leaders have made similar points – emphasizing the latent

matter of justice among the various nations of the world and between our and future generations."); National Council of Churches of Christ, *Eco-Justice Programs: Climate Change and Global Warming*, http://nccecojustice.org/climate/ ("Climate change is a threat to all people and all of creation."); National Council of Churches USA and Church World Service, *A Social Creed for the 21st Century 2* (November 7, 2007), *available at* http://www.ncccusa.org/news/ga2007.socialcreed.html (pledging to be "stewards of God's good creation, by working for . . . binding covenants to reduce global warming and protect populations most affected.").

effects of current emissions on future generations, and the importance of acting now, even in the absence of certainty.¹⁰

What this means is that, as five leading clergymen have put it, moral principles require us "to act now to protect the common good." Statement of Senior Religious Leaders on Global Climate Change and Poverty, November 27, 2007, available at http://www.nrpe.org/pressmaterials/lettertomemofcongress.pdf.

Amici therefore support the lawsuit the Plaintiffs-Respondents have brought, and reject the notion advanced by Defendants-Petitioners that courts should refuse to undertake direct action to reduce emissions.

¹⁰ See Testimony of Mark X. Jacobs, Director of COEJL, to the Subcomm. on Transportation of the Committee on Appropriations, U.S. House of Representatives (Feb. 10, 2000), available at http://coejl.org/news/20000210 cafetest.php(""The Bible instructs us to cautiously and prudently err in favor of protecting human life and health"; "we must take action to protect others from any object of potential danger," even when the danger "is not imminent or certain."); A Statement of Concern on Climate Change and the Need for Clean Energy, CREATION CARE (Winter 2002) (quoted in NRPE, The Evangelical Perspectives on Climate and available at http://www.nrpe.org/issues/i_air/ air evangelical a02.htm) (leading Evangelical scientists state that: "When it comes to environmental problems like global climate change that necessitate government action based on scientific discernment, we agree with the Precautionary Principle. Where there are threats of serious or irreversible damage, lack of full scientific certainty shall not be used as a reason for postponing cost-effective measures to prevent the degradation of Christ's creation."); The Evangelical Climate Initiative, Climate Change, supra at 6 (noting that "the oceans only warm slowly, creating a lag in experiencing the consequences").

Specifically, the Petitioners/Defendants maintain that these lawsuits cannot be prosecuted, regardless of their merit. They say that the plaintiff States and land trusts have not suffered concrete and redressable injuries, and that courts should defer to other branches of government – even though these branches have so far failed to limit Defendants'-Petitioners' emissions of carbon dioxide from the sources at issue in this case. But these arguments are premised on a misunderstanding about the urgency of taking action against global warming. As the foregoing recitation of principles suggest, this misunderstanding is quite grave. To permit continued inaction is to invite catastrophe.

We emphatically urge this Court to err on the side of prudence, to err on the side of action and justice, and to allow this lawsuit to proceed.

CONCLUSION

This Court should affirm the decision below.

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