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SHOPPING FOR STATE CONSTITUTIONS: UNEQUAL GIFT CLAUSES AS OBSTACLES TO OPTIMAL
STATE ENCOURAGEMENT OF CARBON SEQUESTRATION

Nicholas Houpt

Carbon capture and sequestration technology (CCS) could drastically reduce CO₂ emissions from coal-fired power plants, thereby mitigating climate change. CCS, however, faces a difficult barrier to market entry: liability for the technology's many long-term risks. States would like to alleviate this long-term liability problem to capture CCS's social benefits. Some state constitutions, however, have provisions called "gift clauses" that prohibit giving aid to private parties. This Note argues that some state constitutions' gift clauses prevent indemnification of private CCS developers. As this Note's fifty state survey shows, other state constitutions allow indemnification. This asymmetry in constitutionally-allowed financial encouragement results in unfair interstate competition and poor incentives for safe site-selection. This Note then proposes some alternative financing strategies that states can use to close the gap and federal interventions that could level the playing field.

Introduction

Climate change is an urgent, worldwide problem that threatens catastrophic consequences to humanity.¹ The anthropogenic emissions of greenhouse gases (GHGs), especially carbon dioxide (CO₂), have caused and continue to contribute to this problem.² GHGs cause warming

¹ Conference of the Parties to the United Nations Framework Convention on Climate Change, Copenhagen, Den., Dec. 7-18, 2009, Draft Decision: Copenhagen Accord, dec. -/CP.15, U.N. Doc. FCCC/CP/2009/L.7 (Dec. 18, 2009) [hereinafter Copenhagen Accord], available at <http://unfccc.int/resource/docs/2009/cop15/eng/107.pdf>; See Conference of the Parties to the United Nations Framework Convention on Climate Change, Bali, Indon., Dec. 3-15, 2007, Report of the Conference of the Parties - Addendum, Part Two: Action Taken by the Conference of the Parties at its Thirteenth Session, dec. 1/CP.13, U.N. Doc. FCCC/CP/2007/6/Add.1 (Mar. 14, 2008) [hereinafter Bali Action Plan], available at <http://unfccc.int/resource/docs/2007/cop13/eng/06a01.pdf>; I. ALLISON, N. L. BINDOFF, R.A. BINDOFF, R.A. BINDSCHADLER, P.M. COX, N. DE NOBLET, M.H. ENGLAND, J.E. FRANCIS, N. GRUBER, A.M. HAYWOOD, D.J. KAROLY, G. KASER, C. LE QUÉRÉ, T.M. LENTON, M.E. MANN, B.I. MCNEIL, A.J. PITMAN, S. RAHMSTORF, E. RIGNOT, H.J. SCHELLNHUBER, S.H. SCHNEIDER, S.C. SHERWOOD, R.C.J. SOMERVILLE, K. STEFFEN, E.J. STEIG, M. VISBECK, A.J. WEAVER. THE UNIVERSITY OF NEW SOUTH WALES CLIMATE CHANGE RESEARCH CENTRE, THE COPENHAGEN DIAGNOSIS, 2009: UPDATING THE WORLD ON THE LATEST CLIMATE SCIENCE (2009) [hereinafter Copenhagen Diagnosis], available at http://www.ccr.unsw.edu.au/Copenhagen/Copenhagen_Diagnosis_LOW.pdf; INTERGOVERNMENTAL PANEL ON CLIMATE CHANGE, CLIMATE CHANGE 2007: SYNTHESIS REPORT (Pachauri, R.K. and Reisinger, A. eds.) (2007) [hereinafter IPCC Report] (synthesizing the IPCC working groups' study of the causes, effects, and mitigation of climate change).

² COPENHAGEN DIAGNOSIS at 5-6; IPCC REPORT; Copenhagen Accord; Bali Action Plan; United Nations Framework Convention on Climate Change, Article 2, 9 May 1992, 1771 U.N.T.S. 107, 31 I.L.M. 849 (entered into force 21 March 1994).

through a mechanism of “radiative forcing,” which means that the gases accumulate in the atmosphere and allow less solar radiation to escape, effectively trapping that heat here on earth.³ One of the primary solutions to this problem is to lower GHG emissions from the energy sector, a primary source of such emissions.⁴ There are many ways of doing this: 1) switching to renewable sources of energy, such as wind and solar;⁵ 2) switching to more efficient sources of energy, such as nuclear power;⁶ or 3), the focus of this Note, capturing the GHGs emitted during energy production, such as by carbon capture and sequestration (CCS).⁷ CCS is the process of capturing CO₂ emissions when burning coal to produce electricity and storing that CO₂ in such a way that it will not enter the atmosphere.⁸ CCS will likely be a major part of any climate change solution, because coal is a major source of the world’s electricity, and lowering emissions from coal-fired power plants will be a necessary step in the transition to renewable sources of energy.⁹

The academic legal literature has addressed many of the legal facets of renewable energy, including tax incentives, liability issues, how these technologies fit into the current framework of

³ COPENHAGEN DIAGNOSIS at 2-7; IPCC REPORT at 37.

⁴ S. Pacala & R. Socolow, *Stabilization Wedges: Solving the Climate Problem for the Next 50 Years with Current Technologies*, 305 SCIENCE 968 (2004); R.E.H. SIMS ET AL., INTERGOVERNMENTAL PANEL ON CLIMATE CHANGE, 2007: ENERGY SUPPLY, IN CLIMATE CHANGE 2007: MITIGATION (B. Metz et al. eds., 2007) [hereinafter IPCC ENERGY REPORT] (generally analyzing the role of various energy sources as potential solutions to climate change).

⁵ Pacala & Socolow, *supra* note 4; IPCC ENERGY REPORT.

⁶ MASSACHUSETTS INSTITUTE OF TECHNOLOGY, UPDATE OF THE MIT 2003 FUTURE OF NUCLEAR POWER STUDY (2009), available at <http://web.mit.edu/nuclearpower/pdf/nuclearpower-update2009.pdf>; MASSACHUSETTS INSTITUTE OF TECHNOLOGY, THE FUTURE OF NUCLEAR POWER: AN INTERDISCIPLINARY STUDY (2003), available at <http://web.mit.edu/nuclearpower>.

⁷ EDWARD RUBIN ET AL., TECHNICAL SUMMARY, IN INTERGOVERNMENTAL PANEL ON CLIMATE CHANGE SPECIAL REPORT, CARBON DIOXIDE CAPTURE AND STORAGE 20 (2007) [hereinafter IPCC CCS REPORT], available at http://www.ipcc.ch/pdf/special-reports/srcs/srcs_wholereport.pdf; HIRANYA FERNANDO ET AL., WORLD RESOURCES INSTITUTE, CAPTURING KING COAL: DEPLOYING CARBON CAPTURE AND STORAGE SYSTEMS IN THE U.S. AT SCALE (2008).

⁸ IPCC CCS REPORT; Fernando, *supra* note 7, at 7-8.

⁹ IPCC CCS REPORT, *supra* note 7, at 20 (predicting that the world’s energy supply “will continue to be dominated by fossil fuels until at least the middle of the century”).

energy law, and how they work within emerging legal structures such as cap-and-trade schemes.¹⁰

The legal aspects of CCS, however, have received less thorough treatment. Scholars have identified and analyzed property rights and liability issues,¹¹ and they have argued for particular legal responses at both the state and federal levels to deal with these issues.¹² The current literature has, however, ignored the significance of state constitutional limitations on public spending and state debt.

Both states and the federal government want to incentivize the development of CCS technology, because this socially beneficial technology currently faces difficult barriers to

¹⁰ For a comprehensive overview of U.S. legal aspects of climate change, see MICHAEL GERRARD (ed.), *GLOBAL CLIMATE CHANGE AND U.S. LAW* (2007); John C. Dernbach, “U.S. Policy” in *Global Climate Change and U.S. Law* (Michael Gerrard, ed.) (2007). For a concise, annotated bibliography of sources dealing with law, climate change, and renewable energy, see Isa Lang, *Wrestling with an Elephant: A Selected Bibliography and Resource Guide on Global Climate Change*, 100 *LAW LIBR. J.* 675 (2008). For articles on specific energy sources, consult the following: Donald N. Zillman & Raymond Deeny, *Legal Aspects of Solar Energy Development*, 1976 *ARIZ. ST. L.J.* 25; Sara C. Bronin, *Solar Rights*, 89 *B.U.L. REV.* 1217 (2009); Adam M. Dinnell and Adam J. Russ, *The Legal Hurdles to Developing Wind Power as an Alternative Energy Source in the United States: Creative and Comparative Solutions*, 27 *NORTHWESTERN JOURNAL OF INTERNATIONAL LAW AND BUSINESS* 535 (2007); Jeffrey S. Hinman, *Symposium: The Green Economic Recovery: Wind Energy Tax Policy After Financial Crisis and the American Recovery and Reinvestment Tax Act of 2009*, 24 *J. ENVTL. L. & LITIG.* 35 (2009); Sanya Carleyolsen, *Tangled in the Wires: An Assessment of the Existing U.S. Renewable Energy Legal Framework*, 46 *NATURAL RESOURCES JOURNAL* 759 (2006).

¹¹ Alexandra B. Klass and Elizabeth J. Wilson, *Climate Change and Carbon Sequestration: Assessing a Liability Regime for Long-Term Storage of Carbon Dioxide*, 58 *EMORY L.J.* 103, 133-45 (2008) (describing liability issues with property rights, trespass, negligence, negligence per se, nuisance, strict liability, abnormally dangerous activities, and damages); see also IOGCC TASK FORCE ON CARBON CAPTURE AND GEOLOGIC STORAGE, *STORAGE OF CARBON DIOXIDE IN GEOLOGIC STRUCTURES: A LEGAL AND REGULATORY GUIDE FOR STATES AND PROVINCES* [hereinafter IOGCC] (2007), available at <http://www.gwpc.org/e-library/documents/co2/IOGCC%20Master%20CO2%20Regulatory%20Document%209-2007.pdf>; Victor B. Flatt, *Paving the Legal Path for Carbon Sequestration from Coal*, 19 *DUKE ENVTL. L. & POL’Y F.* 211 (2009); Peter S. Glaser, *Global Warming Solutions: Regulatory Challenges and Common Law Liabilities Associated with the Geological Sequestration of Carbon Dioxide*, 6 *GEO. J.L. & PUB. POL’Y* 429 (2008).

¹² Klass and Wilson, *supra* note 11, at 172-179 (recommending a primarily federal adaptive regulatory framework for CCS); IOGCC at 3 (favoring state regulation of CCS); Flatt, *supra* note 11, at 218-220 (recommending federal preemption of local land-use restrictions), 224-29 (recommending several options for a comprehensive federal liability scheme); Glaser, *supra* note 11, *passim* (discussing several regulatory issues and solutions for geologic sequestration, but expressing no preference for state or federal regulation).

market entry.¹³ Some aspects of CCS technology are still not well developed,¹⁴ and CCS also involves many substantial risks: groundwater contamination, earthquakes, explosions, and CO₂ leaks which would contribute to climate change.¹⁵ These risks will be present for thousands of years, long beyond the life of the company using the technology.¹⁶ The government, having the institutional capacity to deal with such long-term risks, must then take control of CCS storage sites and make the prospect of long-term liability palatable for CCS developers.¹⁷ This challenge of long-term liability is unique to CCS technology. Renewable energy technologies have no similar problems, and states' plans to deal with CCS' unique problem raise state constitutional difficulties.

With the proper incentives, private companies can develop CCS to the point where it could be commercially available and used to cut coal plants' CO₂ emissions on an industrial scale.¹⁸ States also want to provide the best incentives for CCS developers so that they can attract these businesses.¹⁹ The best incentive package that states can offer is indemnification against all long-term liability coupled with short-term financial incentives.²⁰ Some states'

¹³ InsideEpa.com, *Western Businesses Warn EPA Liability Rules May Sink CCS Projects*, October 26, 2009; Fernando, *supra* note 7, at ; IOGCC.

¹⁴ IPCC CCS REPORT; Fernando, *supra* note 7, at.10-14.

¹⁵ For a brief discussion of the risks associated with CCS technology, see Flatt, *supra* note 11, at 219-22; for a more technical and detailed discussion, Glaser, *supra* note 11, at 432-34; *see also* Sumit Som, *Creating Safe and Effective Carbon Sequestration*, 17 N.Y.U. ENVTL. L. J. 961, 968-71 (2008); Elizabeth J. Wilson, Timothy L. Johnson & David W. Keith, *Regulating the Ultimate Sink: Managing the Risks of Geologic CO₂ Storage*, 37 ENVTL. SCI. TECH. 3476 (2003); for a discussion of the general climate risk from the perspective of the insurance industry, *see* Evan Mills, *The Role of U.S. Insurance Regulators in Responding to Climate Change*, 26 UCLA J. ENVTL. L. & POL'Y 129 (2007-2008).

¹⁶ INT'L RISK GOVERNANCE COUNCIL, REGULATION OF CARBON CAPTURE AND STORAGE, 13, 23 (2008); Som, *supra* note 15, at 981.

¹⁷ IOGCC at 9-10; JOHN P. MARTIN, NEW YORK STATE ENERGY RESEARCH AND DEVELOPMENT AUTHORITY, CARBON DIOXIDE CAPTURE AND SEQUESTRATION: DEVELOPING A REGULATORY STRATEGY FOR NEW YORK STATE [hereinafter NYSEDA REPORT] 74 (2009).

¹⁸ IOGCC at 9; Fernando, *supra* note 7, at 7-8.

¹⁹ Texas S. B. No. 1461, enacted April 26, 2007; "Clean Coal FutureGen for Illinois Act," Illinois Public Act 095-0018 (SB 1704 enrolled); NYSEDA REPORT at 58-62 (discussing numerous policy options to incentivize CCS development); Klass at 121-23.

²⁰ IOGCC at 11-12; NYSEDA REPORT at 58-62.

constitutional provisions, however, could disallow such financial incentives and change the landscape of state competition for CCS developers.

These state constitutional provisions are called “gift clauses,” and they prevent a state from lending its credit to private individuals or corporations, even if that action would serve a public purpose.²¹ These clauses were added to state constitutions in response to disastrous state investments in railroad development, many of which occurred during the Panic of 1837.²² Many states lent credit to speculative railroad projects that eventually failed, which bankrupted several states.²³ Only some states’ clauses retain their original teeth; many have been watered down with public purpose exceptions.²⁴

This Note argues that strict versions of state constitutional “gift clauses” prevent some states from providing CCS developers with indemnification, as that constitutes an unconstitutional “debt” of the state. In Part I, this Note describes climate change, CCS technology, the role of CCS in fighting climate change, the risks and liability concerns accompanying CCS, and the roles of federal and state governments in overseeing CCS. In Part II, this Note describes state constitutional gift clauses, their history and policy rationales, and how CCS indemnification presents an especially troublesome scenario for gift clause limitations. In Part III, this Note uses the example of New York to argue that CCS indemnification is unconstitutional under strict gift clauses. The Note then suggests and evaluates several other

²¹ New York’s constitutional language is representative: “The money of the state shall not be given or loaned to or in aid of any private corporation or association, or private undertaking.” N.Y. CONST. art VII, § 8, para. 1. Richard Briffault, *The Disfavored Constitution: State Fiscal Limits and State Constitutional Law*, 34 RUTGERS L.J. 907 (2003); David E. Pinsky, *State Constitutional Limitations on Public Industrial Financing: An Historical and Economic Approach*, 111 U. PA. L. REV. 265; Ralph L. Finlayson, *State Constitutional Prohibitions Against Use of Public Financial Resources in Aid of Private Enterprises*, 1 Emerging Issues St. Const. L. 177 (1988).

²² Pinsky, *supra* note 21, at 277.

²³ See G. ALAN TARR, UNDERSTANDING STATE CONSTITUTIONS 111-12 (1998); Pinsky, *supra* note 21, at 277; Briffault, *supra* note 21, at 912.

²⁴ Briffault, *supra* note 21, at 912. See *infra* Appendix (50 state survey with citations to judicially recognized public-purpose exceptions).

state policy proposals that would be constitutional. This Note will also show that gift clause differences among states lead to serious problems with CCS development and the response to global warming. Finally, this Note proposes a potential federal solution: the preemption of state gift clauses for the purpose of CCS development.

I. Background

This section provides the factual and policy background of CCS and its role in addressing climate change. It then describes the risks of CCS and the liability regimes applicable to those risks. These liability concerns pose a barrier to CCS development, and this section discusses how a governmental intervention could remove that barrier through various types of financial incentives. To close, this section describes the current policy debate about whether the federal or state government should take primary responsibility for incentivizing and managing CCS.

a. Climate Change and the Role of CCS

Global climate change is one of the world's largest and most urgent problems: if not addressed swiftly and adequately, it could lead to catastrophic and irreversible consequences.²⁵ Many of climate change's consequences, such as exacerbating extreme weather, are already being felt around the world.²⁶ Emissions of GHGs, especially CO₂, are the primary cause of this problem.²⁷ Essentially, collection of GHGs "affect[s] the absorption, scattering and emission of

²⁵ See generally INTERGOVERNMENTAL PANEL ON CLIMATE CHANGE, CLIMATE CHANGE 2007: SYNTHESIS REPORT (Pachauri, R.K. and Reisinger, A. eds.) (2007) [hereinafter IPCC REPORT] (synthesizing the IPCC working groups' study of the causes, effects, and mitigation of climate change). For a skeptical view of climate change, see, e.g., C. D. IDSO AND K. E. IDSO, CENTER FOR THE STUDY OF CARBON DIOXIDE AND GLOBAL CHANGE, CARBON DIOXIDE AND GLOBAL WARMING: WHERE WE STAND ON THE ISSUE (1998), available at <http://www.co2science.org/about/position/globalwarming.php>.

²⁶ See, e.g., INTERGOVERNMENTAL PANEL ON CLIMATE CHANGE, CLIMATE CHANGE 2007: IMPACTS, ADAPTATION AND VULNERABILITY (M.L. Parry et al. eds., 2007); P.J. Webster et al., *Report: Changes in Tropical Cyclone Number, Duration, and Intensity in a Warming Environment*, 309 SCIENCE 1844 (September 16, 2005); Richard A. Kerr, *Is Katrina a Harbinger of Still More Powerful Hurricanes?*, 309 SCIENCE 1807 (September 16, 2005); IPCC REPORT, *supra* note 1, at 30; COPENHAGEN DIAGNOSIS at 9-10.

²⁷ IPCC REPORT, *supra* note 1, at 37.

radiation within the atmosphere and at the Earth's surface", which results in a warming effect.²⁸

A primary means to reduce CO₂ emissions is to change the production and use of energy, e.g. by switching to renewable fuels that emit fewer GHGs or by increasing energy efficiency.²⁹

Reducing emissions from coal-fired power plants is a logical first step to combating climate change in the U.S. Coal is a major source of America's energy, providing 23% of total energy demanded and 50% of electricity.³⁰ Coal-fired power plants are also major emitters of CO₂ and emit at a rate higher than other fossil fuels.³¹ Given coal's strong presence in the American energy market, it is likely that reducing coal emissions will be part of the solution to climate change, especially since any eventual transition to cleaner or renewable fuels will take decades.³²

A new technology, CCS, could allow coal-fired power plants to reduce CO₂ emissions drastically.³³ Essentially, this technology can collect the CO₂ gas that would be emitted, and this gas can be stored underground or in the ocean, instead of collecting in the atmosphere.³⁴ There are four steps to this process. First, technology located at the industrial source extracts the CO₂ from the fossil fuel, either before or during the industrial process.³⁵ Second, that CO₂ is compressed in preparation for transport, and is transported to the storage site.³⁶ Third, the

²⁸ *Id.* at 37.

²⁹ Pacala and Socolow, *supra* note 4; R.E.H. SIMS ET AL., INTERGOVERNMENTAL PANEL ON CLIMATE CHANGE, 2007: ENERGY SUPPLY, IN CLIMATE CHANGE 2007: MITIGATION (B. Metz et al. eds., 2007) (generally analyzing the role of various energy sources as potential solutions to climate change).

³⁰ ELECTRIC POWER ANNUAL, *supra* note 5, at 2.

³¹ ENERGY INFO. ADMIN., U.S. DEP'T OF ENERGY, EMISSIONS OF GREENHOUSE GASES IN THE UNITED STATES IN 2007 (2008), available at <http://www.eia.doe.gov/oiaf/1605/ggrpt/pdf/0573%282007%29.pdf>; BRUCE A. ACKERMAN & WILLIAM T. HASSLER, CLEAN COAL/DIRTY AIR (1981).

³² ELECTRIC POWER ANNUAL, *supra* note 5, at 2 (describing coal's share of U.S. energy); IPCC CCS Report, *supra* note 7 at 20 (predicting that the world's energy supply "will continue to be dominated by fossil fuels until at least the middle of the century").

³³ IPCC CCS REPORT, *supra* note 7, at 19, 43.

³⁴ *Id.* at 19.

³⁵ *Id.* at 19.

³⁶ *Id.* at 19, 29-30.

captured, compressed CO₂ is injected into a storage site, such as a geologic repository.³⁷ Finally, once the storage site is full, it must be properly closed or “capped,” so that the stored CO₂ does not leak out.³⁸

Some environmental groups think that this technology falsely promises “clean coal,” and that it is an undesirable development - a distraction from the real solutions to climate change.³⁹ That is, money goes to coal companies⁴⁰ instead of to renewable energy, either slowing down the response to climate change or pushing the problem on to future generations.⁴¹ This Note does not take a position on this policy debate, but the policy disagreement could provide ample reason to litigate against CCS development.⁴² To the extent that there are gift clause problems with CCS indemnification, litigation is a viable weapon and, at worst, a source of additional uncertainty for CCS developers.

³⁷ *Id.* at 19.

³⁸ *Id.* at 32.

³⁹ GREENPEACE, PROJECT HOTSEAT: DANGEROUS DISTRACTIONS, http://us.greenpeace.org/site/PageNavigator/hotseat/PHS_Dangerous_Distractions; GREENPEACE, AMERICAN COALITION FOR CLEAN COAL GREENWASHING DIRTY COAL, http://www.stopgreenwash.org/casestudy_abec; SIERRA CLUB, STOPPING THE COAL RUSH, <http://www.sierraclub.org/environmentallaw/coal/>.

⁴⁰ This Note will use “coal company” or “CCS developer” as a shorthand for the types of entities that would engage in CCS activity. Typically, such entities are coal-fired power plants that generate electricity, but some CCS developers are working solely on the injection and storage aspects of the technology. See *infra* n. 44.

⁴¹ GREENPEACE, GREENWASHING, *supra* note 39 (“Perhaps the most misleading component of ACCCE’s campaign is its implication that new and better CCS technologies capable of creating ‘near-zero emissions’ are right around the corner. In reality, some scientists feel that the earliest CCS technology could be implemented is 2030 and would cost billions.”); GREENPEACE, DANGEROUS DISTRACTIONS, *supra* note 39 (“We’ll never stop global warming if we continue burning coal for energy[,]” and “Every dollar spent on energy efficiency and alternative energy like wind and solar goes 7-10 times further than nuclear in reducing our global warming pollution.” Although the latter quote compares renewable energy to nuclear power, the thrust of the claim applies to the other sources that the article disfavors.).

⁴² Environmental groups have a history of bringing (and occasionally winning) lawsuits with novel or long-shot legal theories against their policy opponents (typically industries). See *Massachusetts v. U.S. Environmental Protection Agency*, 549 U.S. 497 (2007) (environmental groups joined state litigation forcing the Environmental Protection Agency to regulate CO₂ emissions from automobiles); *Connecticut v. American Electric Power*, 582 F.3d 309 (2d Cir. 2009) (environmental groups joined state-initiated GHG nuisance suit against Midwestern power companies). The state constitutional gift clauses provide such a legal theory to use against CCS development. If successful, these lawsuits might convince states to use former CCS money for renewable energy projects.

b. CCS Risks and Liability Concerns

1. CCS Risks

Much CCS technology is still in an early stage of development.⁴³ Only a few projects around the world are currently using this technology on an industrial scale.⁴⁴ Nevertheless, the risks are fairly well known. There are four major risks: 1) induced seismicity, 2) acidification of ground water, 3) slow leakage of CO₂, and 4) release of highly pressurized CO₂.⁴⁵ First, CCS injection can increase pressure deep below ground and cause seismic events, which could reach a magnitude sufficient to damage property and pose a risk to human lives.⁴⁶ Second, CCS could contaminate groundwater and present a public-health risk if CO₂ leaks entered an aquifer or pushed brine into an aquifer.⁴⁷ That is, CO₂ leaks could acidify sources of drinking water. Third, CO₂ leakage also presents a climate risk: CO₂ could escape the geologic formation and enter the atmosphere, thus contributing to climate change.⁴⁸ Fourth, failures in the injection well

⁴³ IPCC CCS REPORT, *supra* note 7, at 19, 21. But much of the technology, such as well-drilling and injection, has been used in oil and natural gas contexts for years and is well understood. *See* IPCC CCS REPORT, *supra* note 7, at 31.

⁴⁴ The major, industrial scale CCS projects are Sleipner in the North Sea, operated by StatoilHydro, Weyburn-Midale in Canada, operated by EnCana, Snøvit in the Barents Sea, operated by Statoilhydro, and Salah, Algeria, operated by BP, Sonatrach and Statoilhydro. INTERNATIONAL ENERGY AGENCY, IEA GREENHOUSE GAS R&D PROGRAMME, CO₂ CAPTURE AND STORAGE (a comprehensive list of CCS pilot projects, including numerous smaller ones focused on specific aspects of the technology), available at <http://www.co2captureandstorage.info/search.php>. Note that none of these projects involve coal-fired power plants, but merely the sequestration of CO₂ on an industrial scale.

⁴⁵ For a brief discussion of the risks associated with CCS technology, *see* Flatt, *supra* note 11, at 219-22; for a more technical and detailed discussion, *see* Glaser, *supra* note 19, at 432-34; *see also* Som, *supra* note 15, at 968-71; Elizabeth J. Wilson, Timothy L. Johnson & David W. Keith, *Regulating the Ultimate Sink: Managing the Risks of Geologic CO₂ Storage*, 37 ENVTL. SCI. TECH. 3476 (2003); for a discussion of the general climate risk from the perspective of the insurance industry, *see* Evan Mills, *The Role of U.S. Insurance Regulators in Responding to Climate Change*, 26 UCLA J. ENVTL. L. & POL'Y 129 (2007-2008).

⁴⁶ Glaser, *supra* note 19, at 433 (“The increased pressure associated with injecting CO[2] into deep rock formations can result in ground heave, fracturing of cap rock, and even earthquakes.”).³³ Although most seismic activity induced by underground injection is relatively small (99 percent of events register less than Magnitude 2.5 on the Richter scale, below human detection levels) larger events have been observed, with the largest registering Magnitude 5.5 on the Richter scale.”).

⁴⁷ IPCC CCS REPORT, *supra* note 7, at 34.

⁴⁸ *Id.* at 34.

could also lead to a blow-out, which is a highly pressurized release of CO₂.⁴⁹ Management of this risk is well developed, as the oil and natural gas well industry has dealt with it for years.⁵⁰ Nevertheless, it still presents a risk to responding workers and any other nearby people and wildlife.⁵¹ One example of a natural CO₂ release is the 1986 incident in Lake Nyos, Cameroon. There, volcanic activity induced a release of 100 kilotons of CO₂ which killed 1,700 people and suffocated thousands of animals.⁵² Also, these risks are not isolated to a single step of the process, but will be present for the expected millennia of storage.⁵³ Lastly, although “the fraction [of CO₂] retained in appropriately selected and managed reservoirs is very likely to exceed 99% over 100 years, and is likely to exceed 99% over 1000 years[,]”⁵⁴ absolute containment of CCS is likely impossible.⁵⁵

2. Liability for CCS Risks

These risks raise several liability issues at both state and federal levels. Under state common law, a CO₂ release could kill human beings or damage property, giving rise to tort liability.⁵⁶ State environmental statutes could also impose liability. For example, one could be found liable

⁴⁹ *Id.* at 34.

⁵⁰ *Id.* at 34.

⁵¹ *Id.* at 34.

⁵² Glaser, *supra* note 19, at 432.

⁵³ See Som, *supra* note 15, at 970-71 (discussing how CO₂ leakage over time could not only defeat the purpose of CCS, but lull humanity into a false sense of security by causing humanity to forgo other options, because climate change was thought to have been avoided).

⁵⁴ IPCC CCS REPORT, *supra* note 7, at 34.

⁵⁵ Glaser, *supra* note 19, at 433.

⁵⁶ See Klass and Wilson, *supra* note 11, at 133-45 (describing liability issues with property rights, trespass, negligence, negligence per se, nuisance, strict liability, abnormally dangerous activities, and damages).

under state law for contaminating groundwater, improperly disposing of waste, or contamination of a site.⁵⁷

Three federal statutes are also likely to impose liability on CCS risks: 1) the Resource Conservation and Recovery Act (RCRA), 2) the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), and 3) The Safe Drinking Water Act (SDWA).⁵⁸ First, RCRA has requirements for disposal of solid and hazardous waste. For these requirements to apply, CO₂ must be classified as a solid or hazardous waste, which has not yet happened.⁵⁹ Under RCRA, a private plaintiff could potentially receive injunctive relief compelling remediation of any imminent harm to human health, in addition to monitoring, investigation, testing, and cleanup costs.⁶⁰ RCRA can also apply retroactively if there is a present threat.⁶¹

Second, CERCLA imposes liability for natural resource damages and cleanup of contaminated sites. CERCLA liability is contingent on the classification of CO₂ as a hazardous waste.⁶² Recovery is limited, however, to response costs.⁶³ Response costs are “money spent on the investigation and remediation of a release of hazardous substances”,⁶⁴ but some related state

⁵⁷ See, e.g., N.Y. ECL §§ 15-0514 (protecting groundwater), 27-1313 (establishing state superfund program, which allows the state to recover costs for cleaning up a site that was contaminated by a private party).

⁵⁸ Klass and Wilson, *supra* note 11, at 124-28 (describing CCS liability under RCRA) and at 128-32 (describing CCS liability under CERCLA); InsideEpa.com, *Western Businesses Warn EPA Liability Rules May Sink CCS Projects*, October 26, 2009 (“...EPA officials have indicated in their most recent draft proposal that they have little ability to block CERCLA and RCRA application to the [CCS] projects.”); Arnold W. Reitze, Jr., *Federal Control of Carbon Dioxide Emissions: What are the Options?*, 36 B.C. ENVTL. AFF. L. REV. 1, 40-41 (2009) (describing the permitting requirements for CCS under the Safe Drinking Water Act); See 42 U.S.C. § 300h(b)(1)(A) (2000).

⁵⁹ Klass and Wilson, *supra* note 11, at 126-27.

⁶⁰ *Id.* at 125-128.

⁶¹ *Id.* at 127-28.

⁶² *Id.* at 127-28.

⁶³ 42 U.S.C. § 6907(a)(4) (limiting CERCLA liability to response costs, natural resource damages, and costs of a health assessment).

⁶⁴ 42 U.S.C. § 6901(25) (“The terms ‘respond’ or ‘response’ means remove, removal, remedy, and remedial action; all such terms (including the terms ‘removal’ and ‘remedial action’) include enforcement activities related thereto.”).

superfund statutes allow recovery for personal injury, lost profits, and attorney's fees, among other things.⁶⁵ CERCLA also has retroactive effect.⁶⁶

Finally, the U.S. Environmental Protection Agency (EPA) has already begun regulating the underground injection of CO₂ pursuant to the SDWA.⁶⁷ The EPA's authority under the SDWA, however, is limited to permitting procedures and enforcement mechanisms to prevent the migration of injected material into underground drinking water.⁶⁸

Re-release of CO₂ into the atmosphere could also result in liability under a regulatory regime for CO₂ emissions, which appears likely to arrive soon.⁶⁹

3. Effects of Liability on CCS Development and the Government's Role

The liability concerns identified in the previous section create a high hurdle to market entry.⁷⁰

Recognizing this hurdle and the potential public value of CCS, both state and federal

⁶⁵ Klass and Wilson, *supra* note 11, at 129-131.

⁶⁶ *Id.* at 131.

⁶⁷ Arnold W. Reitze, Jr., *Federal Control of Carbon Dioxide Emissions: What are the Options?*, 36 B.C. ENVTL. AFF. L. REV. 1, 40-41 (2009) (describing the permitting requirements for CCS under the Safe Drinking Water Act); *See* 42 U.S.C. § 300h(b)(1)(A) (2000).

⁶⁸ Glaser, *supra* note 11, at 434-436 (noting also that the SDWA is ill-suited for industrial-scale CCS projects and long-term storage).

⁶⁹ *See, e.g.*, Jim Tankersly, *EPA Greenhouse Gas Regulations Coming*, THE SWAMP, September 30, 2009 (describing how EPA's proposed regulation of CO₂ in the wake of *Massachusetts v. EPA* sends a signal to Congress that if Congress does not pass legislation regulating GHGs, then EPA will regulate on its own); Darren Samuelsohn, *Obama's \$3.8T plan includes cap-and-trade placeholder*, GREENWIRE, February 1, 2010 ("President Obama's fiscal 2011 budget unveiled today banks on Congress passing legislation to cap greenhouse gases despite continued uncertainty that such a bill can make it across the finish line."), available at <http://www.eenews.net/Greenwire/2010/02/01/1/>. Some regional regimes for regulating GHGs already exist. *See* Regional Greenhouse Gas Initiative (a partnership of Northeastern states regulating GHG emissions), <http://www.rggi.org/home>; Western Climate Initiative (a group of Western states and Canadian provinces regulating GHG emissions), <http://www.westernclimateinitiative.org/>; Midwestern Greenhouse Gas Initiative (an accord signed by Midwestern Governors to set emissions targets and establish a market regime for emissions trading), <http://www.midwesternaccord.org/midwesterngreenhousegasreductionaccord.pdf>.

⁷⁰ InsideEpa.com, *supra* note 17 (The article quotes an industry coalition: "These laws, if applied broadly to CCS, would impose significant obligations and potential liabilities not only on project operators, but also potentially on other entities in the CO₂ chain, such as entities producing the CO₂ that is ultimately injected. That would put advancement of CCS commercialization into a deep freeze. Such an outcome would clearly be counter-productive.").

governments have attempted to incentivize the development of this new technology.⁷¹ For example, Congress has provided tax and other financial incentives in recent legislation,⁷² and the pending cap-and-trade bill contains similarly generous provisions.⁷³ Also, the Department of Energy has assisted with the financing of a major CCS pilot project, FutureGen.⁷⁴

Indemnification of the CCS developer, FutureGen, for the long-term liability associated with this project was a major component in financial incentive package. Indemnification is essentially a contract to assume someone else's liability.⁷⁵ For example, A indemnifies B by contract. B commits a tort and incurs liability. A has assumed responsibility for that liability and must pay damages, whereas B is held harmless for the liability.

A failed House amendment to the bill authorizing financial assistance would have indemnified the FutureGen Project for up to \$500,000,000.⁷⁶ Illinois and Texas, the states competing for the siting of this project, each passed legislation indemnifying FutureGen and taking title to the captured CO₂.⁷⁷ "Taking title" here means that ownership of the actual CO₂ gas and the site where it is stored would be transferred from FutureGen to the state, so that the state can manage the geologic repository and assume responsibility for any future liability. The

⁷¹ Klass and Wilson, *supra* note 11, at 121-123.

⁷² See American Recovery and Reinvestment Act of 2009, Pub. L. No. 111-5, 123 Stat. 115 (2009), available at http://frwebgate.access.gpo.gov/cgi-bin/getdoc.cgi?dbname=111_cong_bills&docid=f:h1enr.pdf.

⁷³ PEW CENTER ON GLOBAL CLIMATE CHANGE, IN BRIEF: WHAT THE WAXMAN-MARKEY BILL DOES FOR COAL (August 2009), available at <http://www.pewclimate.org/federal/what-waxman-markey-does-for-coal>; The American Clean Energy and Security Act of 2009, H.R. 2454 (2009).

⁷⁴ See DEP'T OF ENERGY, FOSSIL ENERGY: DOE'S FUTUREGEN INITIATIVE, <http://www.fossil.energy.gov/programs/powersystems/futuregen/>.

⁷⁵ 1-3 Appleman on Insurance § 3.3 (describing third-party liability insurance and its conceptual relationship to indemnification).

⁷⁶ Klass and Wilson, *supra* note 11, at 149; Amendment to H.R. 5656 offered by Rep. Costello of Illinois (June 27, 2006).

⁷⁷ Texas S. B. No. 1461, enacted April 26, 2007; "Clean Coal FutureGen for Illinois Act," Illinois Public Act 095-0018 (SB 1704 enrolled). Illinois's statute included tax incentives in addition to the indemnification provisions.

states would also assume retroactive liability under RCRA and CERCLA for FutureGen's contribution to any problems at the site.

From a risk management perspective, there is a strong argument in favor of this process of a governmental entity taking title from private companies or otherwise ensuring long-term care for sequestered CO₂.⁷⁸ The life of a firm might extend for decades, but responsibility for the long-term liability associated with CCS will last for thousands of years.⁷⁹ A governmental entity or oversight program is a natural choice to address this concern.⁸⁰ If CCS is to achieve commercial availability in time to help solve climate change, a partnership between government and private parties is necessary.⁸¹

Either the states or the federal government (or both) could provide the requisite governmental role in handling long-term CCS liability. As with most areas of environmental law, there will likely be overlapping federal and state authority with some sort of cooperative regime.⁸² States are already developing regulatory systems for the property-rights issues with CCS,⁸³ and EPA has begun regulating CCS injection for under the SDWA's Underground Injection Control provisions.⁸⁴ Federal legislation and regulation limiting GHGs and the development of

⁷⁸ Klass and Wilson, *supra* note 11, at 175-77.

⁷⁹ INT'L RISK GOVERNANCE COUNCIL, REGULATION OF CARBON CAPTURE AND STORAGE, 13, 23 (2008); Som, *supra* note 15, at 981.

⁸⁰ See IOGCC at 9-11.

⁸¹ *Id.* at 9-11; see also NYSERDA REPORT at 74.

⁸² See, e.g., 42 U.S.C. § 7410 (requiring state implementation of federally established air quality standards).

⁸³ See NYSERDA REPORT at 10-13; Wyoming House Bill 90 (enacted 2008; codified as W.S. 30-5-501 and 35-11-313) (requiring permits from landowners to sequester CO₂); House Bill 89 (enacted 2008; codified as W.S. 34-1-152 and 34-1-202(e)) (defining rights of pore space ownership); Wyoming House Bill 57 (codified as W.S. 34-1-152(e)) (defining rights of mineral deposit ownership); see also IOGCC at 11, 15-22 (outlining legal approaches to property rights with regard to CCS).

⁸⁴ See Reitze, *supra* note 18, at 40-41. 42 U.S.C. §§ 300h-300h-8 (SDWA Underground Injection Control provisions); 40 C.F.R. §§ 144-148 (regulations implementing SDWA Underground Injection Control Provisions).

comprehensive state regulatory regimes for CCS are on the horizon.⁸⁵ While the federal legislation and regulations do not address long-term liability management, some of the state efforts do.⁸⁶ On the specific issue of managing long-term liability for CCS, both federal and state roles are possible. Federal actions could include amending RCRA and CERCLA to exclude CO₂,⁸⁷ providing an insurance system similar to the Price-Anderson Act,⁸⁸ or otherwise indemnifying utility companies that burn coal.⁸⁹ States could also indemnify or incentivize these utility companies,⁹⁰ or even make themselves unattractive to CCS development.⁹¹

Striking the proper balance between state and federal involvement is a difficult task. Scholars have proposed three primary approaches to regulating CCS: 1) a primarily federal system, 2) a primarily state-driven system, and 3) a balance of overlapping federal and state power.⁹² First, federal legislation, by providing uniform legal rules, arguably better assures

⁸⁵ See Tankersly, *supra* note 19; Christa Marshall, *Another State of the Union Speech Looms, but Climate Activists Want Action*, N.Y. TIMES, Jan. 25, 2010, at [], available at: <http://www.nytimes.com/cwire/2010/01/25/25climatewire-another-state-of-the-union-speech-looms-but-86243.html> (“The president also could use looming climate regulations from U.S. EPA to press lawmakers...”). Cf. Marshall (“Having ‘broken his pick’ on health care, Thernstrom said, Obama now stands much weaker than he did a year ago. ‘He can’t get a cap on emissions passed,’ Thernstrom said. He argued that the president’s best option now is to push for an increase in research, development and deployment of clean energy technologies outside of a climate bill.”).

⁸⁶ NYSERDA REPORT at 42-52; Wyoming House Bill 58 (codified as W.S. 34-1-153) (establishing a legal framework for CCS injectate ownership rights and liability issues); Texas S. B. No. 1461, enacted April 26, 2007; “Clean Coal FutureGen for Illinois Act,” Illinois Public Act 095-0018 (SB 1704 enrolled);

⁸⁷ NYSERDA REPORT at 49; see Klass and Wilson, *supra* note 11, at 127-132 (describing RCRA and CERCLA as “crude tools” to deal with CCS, and suggesting that Congress might take action to address this).

⁸⁸ Price-Anderson Act, 42 U.S.C. § 2210 (capping payments from individual companies at \$17.5 million per year and indemnifying the companies against any additional liability).

⁸⁹ Amendment to H.R. 5656 offered by Rep. Costello of Illinois (June 27, 2006).

⁹⁰ Texas S. B. No. 1461, enacted April 26, 2007; “Clean Coal FutureGen for Illinois Act,” Illinois Public Act 095-0018 (SB 1704 enrolled); NYSERDA Report at 58-62 (discussing numerous policy options to incentivize CCS development).

⁹¹ See Klass and Wilson, *supra* note 11, at 151 (“Despite the fact that the DOE has withdrawn its support for the FutureGen project, the state legislative activity prior to that withdrawal serves as an example of states competing for lucrative governmental investment. The inverse can also be true: states or counties may actively develop protections to disallow industrial facility development.” In support of this point, Klass and Wilson cite to a study of nuclear facility siting and the “not-in-my-backyard” phenomenon: ROBERT VANDENBOSCH & SUSANNE VANDENBOSCH, NUCLEAR WASTE STALEMATE: POLITICAL AND SCIENTIFIC CONTROVERSIES (2007).).

⁹² See, e.g., Klass and Wilson, *supra* note 11, at 178-79 (favoring a comprehensive federal regulatory approach with state tort liability as a backdrop); IOGCC REPORT at 3 (“A key conclusion of that report was that

compensation for injured parties and provides incentives for good site selection and responsible risk management.⁹³ This approach could avoid a “race to the bottom” among states, i.e. states might lower regulatory standards to attract CCS developers, but federal legislation would provide a regulatory floor, below which states could not go.⁹⁴

Second, a regulatory approach led by the states might prove more advantageous. States might be able to act more quickly, integrate CCS into their property rights regimes, and handle the localized operation, maintenance and monitoring better than federal agencies.⁹⁵ Many states are already well-equipped for such tasks by virtue of having established regulatory systems for the management of oil and natural gas wells.⁹⁶

Finally, a combination of these programs might also be desirable, e.g. local expertise in property rights coupled with uniform federal standards,⁹⁷ or a healthy regulatory competition that improves regulation by eliminating its inefficiencies.⁹⁸ For example, federal law could establish uniform safety standards for selection and risk management of geologic repositories, while states

given the jurisdiction, experience, and expertise of states and provinces in the regulation of oil and natural gas production and natural gas storage in the United States and Canada, the states and provinces would be the most logical and experienced regulators of the geologic storage of carbon dioxide.”).

⁹³ Klass and Wilson, *supra* note 11, at 150-54, 178.

⁹⁴ See generally Klass and Wilson, *supra* note 11 (favoring a comprehensive federal approach to CCS regulation, but cautioning against federal preemption of state tort law). Cf. Richard L. Revesz, *Rehabilitating Interstate Competition: Rethinking the “Race to the Bottom” Rationale for Federal Environmental Regulation*, 67 N.Y.U. L. REV. 1210 (1992) (providing empirical evidence against the existence of the “race to the bottom” phenomenon); IOGCC REPORT at 3 (favoring states as the primary regulators of CCS).

⁹⁵ See IOGCC at 9-10.

⁹⁶ See generally Owen L. Anderson, *Geologic CO₂ Sequestration: Who Owns the Pore Space?*, 9 WYO. L. REV. 97 (2009) (describing the current property rights and regulatory regimes for enhanced-oil-recovery projects and its similarity to CCS).

⁹⁷ See Flatt, *supra* note 11, at 238 (“Due to the spectrum of property interests at issue, the diversity of treatment of these interests between the states and the reliance upon the states of these regimes governing existing CO₂ injection sites, federal law should not completely preempt this area of state property law as part of any comprehensive CCS federal legislation.”).

⁹⁸ See, e.g., Uri Geiger, *The Case for the Harmonization of Securities Disclosures in the Global Market*, 1997 COLUM. BUS. L. REV. 241, 268-80 (describing and analyzing regulatory competition theory and the prospect of competitive equilibrium).

would have the primary responsibility for implementing and enforcing those standards. Such a combination of standard-setting by the federal government and implementation by the states has been successfully achieved in the Clean Air Act, in which the federal government establishes National Ambient Air Quality Standards and the states implement them via State Implementation Plans.⁹⁹

Setting aside the policy arguments, legal constraints may also inform the optimal balance between state and federal authority. Some state constitutions constrain the use of public money in support of private enterprise, which could make indemnification or other financial incentives unconstitutional.¹⁰⁰ Furthermore, these limitations are not uniform across the states, which could alter the calculus of state competition for CCS.¹⁰¹ That is, states without fiscal limitations could provide full indemnification, whereas states with stricter fiscal limitations could only provide less valuable financial incentives. This economic distortion could bolster the argument in favor of a stronger federal role in regulating CCS.¹⁰² Or, if state regulation is the better choice, then states will have to develop ways to work within (or around) those constitutional constraints.¹⁰³

II. The Gift Clause Obstacle to CCS Indemnification

⁹⁹ 42 U.S.C. § 7409 (requiring EPA to adopt nationally uniform standards regarding air pollutants that endanger the public health or welfare); 42 U.S.C. § 7410 (requiring states to develop and submit State Implementation Plans to comply with the EPA's National Ambient Air Quality Standards).

¹⁰⁰ See *infra* II, Appendix for complete survey and argument.

¹⁰¹ See Briffault, *supra* note 21, at 946-47 (expressing doubt about the role that state fiscal limits play in corporate decisions while noting the clear potential for abuse).

¹⁰² The economic distortions are countless. For example, a coal company might choose a state with riskier or less cost-effective geologic sequestration sites, because the state with better sites might not have the constitutional authority to provide sufficient financial incentives. Or, coal companies relocate to states with better financial incentives.

¹⁰³ See generally Briffault, *supra* note 21; accord James C. Clingmayer & B. Dan Wood, *Disentangling Patterns of State Debt Financing*, 89 AM. POL. SCI. REV. 108, 116 (1995) (finding that limitations on state debt "have no statistically significant impact on net increases in state debt.").

This section introduces the concept of state constitutional gift clauses and provides a taxonomy of spending limitations. The section then provides the historical basis and policy rationale behind gift clauses; namely, that states lent money to speculative railroad development projects, which later failed and sent several states into a fiscal crisis. This section will also describe the two primary interpretations that courts have generally given these provisions: 1) reading an exception for “public purposes” into the text and 2) reading the text strictly and disallowing any credit to private individuals or companies. After pointing out this minority position of strict gift clauses, the section applies the policy rationale of that minority position to CCS indemnification. This section argues that CCS indemnification presents an even stronger case for prohibition by gift clause than the original railroad crises that precipitated the adoption of such limitations. This section closes by considering and dismissing some counterarguments to the applicability of gift clauses and to the necessity of indemnifying CCS developers.

a. Introduction to Gift Clauses

State constitutional limitations on public spending come in many different forms. Forty-six states have some form of limit on public spending by the state, typically with some specific prohibition of the state’s lending of credit or of the state’s ability to own stock in a private enterprise,¹⁰⁴ or with a general bar on using public money for non-public purposes.¹⁰⁵ New

¹⁰⁴ This Note includes a 50 state survey with preliminary analysis of gift clause jurisprudence and its application to CCS. *See infra* Appendix. For a fuller exposition of a fifty-state survey, *see* Ralph L. Finlayson, *State Constitutional Prohibitions Against Use of Public Financial Resources in Aid of Private Enterprises*, 1 EMERGING ISSUES ST. CONST. L. 177 (1988). I have updated Mr. Finlayson’s list of the states’ gift clauses for this footnote. Forty-one states use some permutation of these limitations. Each constitutional provision and the title of the article in which it appears are as follows: ALA. CONST. art. IV, § 94, as amended by amend. 112 (Legislative Department); ARIZ. CONST. art. IX, § 7 (Public Debt, Revenue and Taxation); ARK. CONST. art. XII, §§ 5 and 7 (Municipal and Private Corporations), art. XVI, § 1 (Finance and Taxation), Amendments, art. no. 13; CAL. CONST. art. XVI, §§ 6 and 17 (Public Finance); COLO. CONST. art. V, § 34 (Legislative Department), art. XI, §§ 1 and 2 (Public Indebtedness); DEL. CONST. art. VIII, §§ 4 and 8 (Revenue and Taxation); FLA. CONST. art. VII, § 10 (Finance and Taxation); GA. CONST. art. III, § VI, para. VI (Legislative Branch), art. VII, § IV, para. VIII (Taxation

York’s constitutional language is representative: “The money of the state shall not be given or loaned to or in aid of any private corporation or association, or private undertaking.”¹⁰⁶ The Alaska Constitution provides a representative example of the more general prohibition: “No tax shall be levied, or appropriation of public money made, or public property transferred, nor shall the public credit be used, except for a public purpose.”¹⁰⁷ This Note groups all of these limitations together as “gift clauses” and distinguishes particular prohibitions where appropriate. Specific prohibitions include “credit clauses”, “stock clauses”, and “current appropriations clauses.”¹⁰⁸ Credit clauses prohibit the state’s lending of credit to a private corporation or individual, stock clauses prohibit the state’s taking stock or investing in a private corporation,

and Finance); IDAHO CONST. art. VIII, §§ 2 and 4 (Public Indebtedness and Subsidies); IND. CONST. art. X, § 5 (Finance), art. XI, § 12 (Corporations); IOWA CONST. art. VII, § 1 (State Debts), art. VIII, § 3 (Corporations); KY. CONST. §§ 171, 177, and 179 (Revenue and Taxation); LA. CONST. art. VII, Part I, §§ 1, 10 and 14 (Revenue and Finance); ME. CONST. art. IX, §§ 14 and 14-A (General Provisions); MD. CONST. art. III, § 34 (Legislative Department); MASS. CONST. amends. arts. 62; MICH. CONST. art. IV, § 30 (Legislative Branch), art. VII, § 26 (Local Government), art. IX, §§ 18 and 19 (Finance and Taxation); MINN. CONST. art. XI, §§ 2 and 12 (Appropriations and Finances); MISS. CONST. art. 7, § 183 (Corporations); art. 14, § 258 (General Provisions); MO. CONST. art. III, § 38a (Legislative Department), art. VI, §§ 23 and 25 (Local Government); MONT. CONST. art. VIII, §§ 8, 10 (Revenue and Finance); NEB. CONST. art. XIII, § 3 (State and Municipal Indebtedness), art. XV, § 17 (Miscellaneous Provisions); NEV. CONST. art. 8, §§ 9 and 10 (Municipal and other Corporations); N.H. CONST. part Second, art. 5 (General Court); N.J. CONST. art. VIII, § II, para. 1, art. VIII, § III, paras. 2 and 3 (Taxation and Finance); N.M. CONST. art. IV, §§ 26 and 31 (Legislative Department), art. IX, § 14 (State County and Municipal Indebtedness); N.Y. CONST. art. VII, § 8, paras. 1, 2 and 3 (State Finances); N.C. CONST. art. V, § 3, paras. (2) and (3) (Finance); N.D. CONST. art. X, § 18 (Finance and Public Debt); OHIO CONST. art. VIII, §§ 4, 6 and 13 (Public Debt and Public Works); OKLA. CONST. art. X, § 15 (Revenue and Taxation); OR. CONST. art. XI, §§ 5, 6, 7 and 9 (Corporations and Internal Improvements); PA. CONST. art. VIII, § 8 (Taxation and Finance); R.I. CONST. art. 6, § 11; S.C. CONST. art. X, § 11 (Finance and Taxation); TENN. CONST. art. II, § 31 (Distribution of Powers); TEX. CONST. art. III, §§ 50, 52 (Legislative Department), art. VIII, § 3 (Taxation and Revenue), art. XVI, § 6 (General Provisions); UTAH CONST. art. VI, § 29 (Legislative Department); VA. CONST. art. X, § 10 (Taxation and Finance); WASH. CONST. art. 8, §§ 5 and 7 (State, County and Municipal Indebtedness), art. 12, § 9 (Corporations other than Municipal); W.VA. Const. art. 10, § 9 (Taxation and Finance); WYO. CONST. art. 16 § 6 (Public Indebtedness).

¹⁰⁵ Five states use a general prohibition: ALASKA CONST. art. IX, § 6 (Finance and Taxation); CONN. CONST. art. 1, § 1 (Declaration of Rights); HAW. CONST. art. VII, § 4 (Taxation and Finance); ILL. CONST. art. VIII, § 1(a) and (b) (Finance); VT. CONST. chap. I, art. 7th (Declaration of the “Rights...”).

¹⁰⁶ N.Y. CONST. art. VII, § 8, para. 1.

¹⁰⁷ ALASKA CONST. art. IX, § 6.

¹⁰⁸ Pinsky, *supra* note 21, at 278-80 (posing this taxonomy of gift clauses).

and current appropriations clauses impose these requirements on municipalities and local governmental entities.¹⁰⁹

b. History of Gift Clauses

Gift clauses were adopted in the middle of the nineteenth century as a response to state experience with private enterprise. Many states insured loans or provided capital for private railroad companies.¹¹⁰ Railroads had great potential for public benefit and could attract new business, but building them was a highly speculative and risky venture.¹¹¹ Several private railroad companies failed commercially, especially following the Panic of 1837, and defaulted on loans, leaving the states scrambling to cover their debts or with large losses.¹¹²

Fed up with government involvement in private speculation, the states' citizens began passing constitutional amendments --- known as gift clauses--- in order to prevent such a fiscal disaster from reoccurring.¹¹³ Most of these amendments were passed in quick response to the Panic of 1837.¹¹⁴ Some state legislatures then circumvented these gift clause prohibitions by authorizing municipalities or localities to lend credit or otherwise give public money to private causes, which often led to the same results of economic crisis and failure.¹¹⁵ In the late

¹⁰⁹ *Id.* at 278-80.

¹¹⁰ *Id.* at 277-282 (describing state involvement with private railroad companies and the instances of default and catastrophe).

¹¹¹ *Id.* at 277.

¹¹² *Id.* at 277.

¹¹³ See G. ALAN TARR, UNDERSTANDING STATE CONSTITUTIONS 111-12 (1998); David A. Super, *Rethinking Fiscal Federalism*, 118 HARV. L. REV. 2544, 2605-06 (2005) (describing Jacksonian economic theory underlying state spending limitations such as credit clauses).

¹¹⁴ Tarr, *supra* note 113, at 112.

¹¹⁵ *Id.* at 113-14.

nineteenth century, many states then extended these fiscal limitations to municipalities and local governments to close this loophole in prior provisions.¹¹⁶

Yet over time, state courts began to carve out exceptions to these constitutional limitations. For example, some courts created a “public purpose” exception, and held that public money could be given to private individuals if it would somehow result in a public benefit.¹¹⁷ During the Great Depression, many courts read the prohibitions very narrowly and upheld public financing mechanisms for private industry. Courts found a variety of valid public purpose justifications, including: increasing employment,¹¹⁸ expanding the tax base,¹¹⁹ and funding individual firms by revenue bonds.¹²⁰ Revenue bond programs fund a particular company or industry by selling a set of state bonds to create a special fund that is separated from the state’s taxpayer-generated general revenue.¹²¹ This separation from the taxpayers’ dollars was often deemed sufficient to validate a program under a gift clause,¹²² though not every court agreed.¹²³

In the modern era, courts have read gift clause prohibitions even more narrowly and expanded the number and type of financing programs upheld. The definition of a valid public

¹¹⁶ Briffault, *supra* note 21, at 912.

¹¹⁷ See, e.g., *Sharpless v. Mayor of Philadelphia*, 21 Pa. 147 (1853); Briffault, *supra* note 21, at 912; Super, *supra* note 113, at 2607 (“As the abuses that gave rise to the Jacksonian provisions faded from memory and an industrializing and urbanizing nation put more demands on its state and local governments, states relaxed some of the Jacksonian strictures. Prohibitions on special legislation have been interpreted narrowly, and expanded borrowing has been permitted in support of public works projects.”).

¹¹⁸ Briffault, *supra* note 21, at 913; see *Common Cause v. State*, 455 A.2d 1 (Me. 1983) (upholding state payment to private corporation in order to persuade corporation to remain in state).

¹¹⁹ Briffault, *supra* note 21, at 913.

¹²⁰ *Id.* at 913, 918-19 (citing B.U. RATCHFORD, AMERICAN STATE DEBTS 446-66 (1941)).

¹²¹ *Id.* at 913, 918-19.

¹²² *Id.* at 918; see *Robertson v Zimmermann*, 268 NY 52, 62 (1935) (upholding debt secured solely by revenues from a public authority).

¹²³ See, e.g., *Eakin v. State ex rel. Capital Improvement Bd.*, 474 N.E.2d 62, 67 (Ind. 1985) (rejecting as “debt” a revenue bond scheme to fund a convention center); *Newell v People*, 7 N.Y. 9, 93 (1852) (striking down as evasive the use of canal bonds to fund a canal project).

purpose now lies primarily with the legislature.¹²⁴ Courts are hesitant to scrutinize the legislature's choice in appropriating funds, and hence they proceed with a highly deferential rationality review.¹²⁵ Recently accepted public purposes include economic growth, attracting businesses to the area, or even the payment of country club fees to lure in corporate executives.¹²⁶ At least one has argued that gift clauses are now largely rhetorical and unenforced, and that state evasion techniques have allowed states to carry the same level of debt as they would have without gift clauses.¹²⁷

Despite this general trend, there are a minority of states with what this Note calls "strict" gift clauses. Strict gift clauses do not have broad public-purpose exceptions and they occasionally strike programs down. New York, for example, retains a strict gift clause with a few specific exceptions added by constitutional amendment.¹²⁸ As recently as 2008, New York's courts have threatened to invoke the gift clause against projects with a proposed use of public funds that did not fall into one of the specific constitutional exceptions.¹²⁹ Courts have also added a few narrow exceptions by refusing to recognize certain financial instruments as creating "debt"

¹²⁴ See Briffault, *supra* note 21, at 914; Clatyon P. Gillette, *Local Redistribution, Living Wage Ordinances, and Judicial Intervention*, 101 NW. U.L. REV. 1057, 1064 (2007) ("Recent opinions reveal nearly automatic acceptance of legislative determinations that proposed programs will redound to the public's benefit or do not obligate the locality in the event the project fails."); see also *In re Okla. Dev. Fin. Auth.*, 89 P.3d 1075, 1081 (Okla. 2004) (finding that courts should defer to legislature on judgments of public purpose unless legislature's determination is clearly arbitrary or capricious).

¹²⁵ Briffault, *supra* note 21, at 914; Gillette, *supra* note 124, at 1064 ("Courts have become more tolerant of local subsidies for economic development, to the point of effectively eviscerating constitutional prohibitions on debt in order to subsidize commercial and industrial enterprises.").

¹²⁶ Briffault, *supra* note 21, at 914; Gillette, *supra* note 124, at 1064 ("More recent decisions consistently approve subsidies not only to the local poor, but to private enterprises that promise broad-based local benefits, or even to middle-class individuals whose very residence in the city is seen as consistent with the promotion of local welfare."); see, e.g., *Mass. Home Mortgage Fin. Agency v. New Eng. Merchs. Nat'l Bank*, 382 N.E.2d 1084 (Mass. 1978) (finding public funding of low-interest mortgages for moderate-income individuals was a valid public purpose).

¹²⁷ Briffault, *supra* note 21, at 914, 925-27; Clinger Mayer and Wood, *supra* note 103, at 116.

¹²⁸ N.Y. CONST. art VIII, paras. 1-3. The exceptions include funding for children who become wards of the state, funding for mental health programs, and funding for urban renewal. N.Y. CONST. art XVIII.

¹²⁹ See, e.g., *People v. Grasso*, 861 N.Y.S.2d 627 (App. Div. 1st Dep't 2008) (pointing out gift clause considerations if NY continued state subsidization of the NYSE after its conversion to a for-profit entity).

within the ambit of the constitutional provision.¹³⁰ For states with strict gift clauses like this, indemnifying private companies for CCS liability could pose a problem.

c. Unique Facets of CCS are Especially Troublesome for Gift Clauses

CCS poses a gift-clause problem that is much more challenging than the historically troublesome but recently accepted uses of public money. The previous programs consisted of the investment of public capital or state underwriting of a railroad loan; though involving substantial sums of money, these were fairly discrete projects with a foreseeable risk.¹³¹ CCS indemnification, on the other hand, places an uncertain risk of liability on a state for thousands of years.¹³² This use of public money is fundamentally different than previously accepted uses, because 1) the magnitude of harm involved, although of low probability, is unknowably large, 2) political accountability functions differently when politicians can externalize risk into the future, and 3) the commitment of public resources has no foreseeable end-date. Similar policy worries motivated the original adoption of gift clauses, but the risks associated with railroad speculation were smaller in scope and in time.¹³³ These unique features of CCS, coupled with state budgetary problems in the current recession, present a strong case for the prohibition of CCS indemnification under gift clauses.

¹³⁰ See *infra* III.f.

¹³¹ That is, the state would often purchase shares or bonds at a fixed price, or lend money to the railroad. Pinsky, *supra* note 21, at 280. The state's financial risk was thus the money invested, which is not an open-ended risk like an uncertain liability for an indefinite period of time.

¹³² See Som, *supra* note 13, at 970-71.

¹³³ Briffault, *supra* note 21, at 947-48 ("With easy access to debt, current elected officials may be tempted to approve projects that are not cost-justified. They can get the credit for the new project, but the blame for the additional taxes needed to pay off the debt will be borne by their successors. With future debts unlikely to become a present campaign issue, ordinary politics may fail to provide effective checks on the decision to incur debt. Thus, constitutional debt limitations may be justified by the lack of effective political controls over the borrowing decision."), 949 (describing carrying capacity and future capital-need problems).

First, the financial risks involved in CCS differ fundamentally from previous activities at the state level. The only analogous long-term indemnification of a large liability is the federally enacted Price-Anderson Act, which provides private nuclear power companies with an insurance-like regime.¹³⁴ Should a nuclear power company face liability for an accident or violation, the company would pay part of the liability and the federal government would cover the rest, much like a typical deductible in a health insurance policy.¹³⁵ The nuclear liability here is analogous to CCS because nuclear waste must be stored indefinitely.¹³⁶

CCS risks however, are too great for a state to take on rationally. For example, CO₂ leakage and ensuing climate liability is foreseeable, but insurance companies do not know how to manage and quantify the risk of CO₂ release and calculate the ensuing climate liability.¹³⁷ Furthermore, the governing liability regimes that will exist one hundred years in the future are unknown,¹³⁸ as is the state's financial status. Unlike an initial investment of capital or a debt guaranty, which are fundamentally limited by the scope of the project and by interest rates,¹³⁹ this risk could be so large as to throw a state's budget off track.¹⁴⁰ In this respect, CCS risks evoke the original rationale of gift clause provisions – to avoid catastrophe. Instead of a fairness rationale, which seemed to drive the public purpose exceptions, the catastrophic risk rationale practically undermines the legislature's decision to pursue something in the public interest.

¹³⁴ See Klass and Wilson, *supra* note 11, at 164-68; Price-Anderson Act, 42 U.S.C. § 2210.

¹³⁵ See Klass and Wilson, *supra* note 11, at 164-68.

¹³⁶ See 10 C.F.R. § 51.23 (Waste Confidence Finding, describing the storage periods of nuclear waste).

¹³⁷ See generally Mills, *supra* note 15.

¹³⁸ The establishment of new standards of liability in the future is only a problem for current coal companies insofar as it is retroactive (and insofar as they are still operating in the future), but retroactivity problems have been overcome by environmental legislation before. See, e.g., CERCLA, 42 U.S.C. § 9601 et seq. (For example, § 9607(2) applies retroactively: “any person who at the time of disposal of any hazardous substance owned or operated any facility at which such hazardous substances were disposed of” is liable for response costs.).

¹³⁹ See *supra* n. 96.

¹⁴⁰ The federal limitation of liability to \$500 million per incident suggests the magnitude of liability at issue. Amendment to H.R. 5656 offered by Rep. Costello of Illinois (June 27, 2006). Also, note that past indemnification policies, such as those for public employees, do not compare to the grand scope of CCS liability.

Taking this kind of catastrophic financial risk is irrational,¹⁴¹ and any legislative action claiming that CCS liability indemnification benefits the public should be struck down.

Second, indemnification of CCS liability poses conflicting political incentives for state politicians. CCS indemnification will likely attract industry and benefit the local economy in the short term.¹⁴² CCS indemnification also has long-term benefits – it mitigates climate change.¹⁴³ The costs, however, are all long-term. After approximately thirty years, a geologic sequestration site will be ready to cap and the state will be ready to take ownership of the CO₂ and assume responsibility for the sequestration.¹⁴⁴ This framework of short-term benefits coupled with long-term costs presents a perfect opportunity for political abuse. Professor Briffault argues that “current elected officials may be tempted to approve projects that are not fully cost-justified. After all, they can get the credit for the new project immediately, while the blame for the additional taxes needed to pay off the debt will be borne by their successors.”¹⁴⁵ Such political incentives should, at the very least, increase the scrutiny with which courts view legislative judgments about public purpose.

¹⁴¹ There are two caveats to this rather strong statement. First, applying a discount rate over the expected term of CO₂ storage could result in a rather small and manageable risk. See Phillip N. Price and Curtis M. Oldenburg, *The consequences of failure should be considered in siting geologic sequestration projects*, 3 INTERNATIONAL JOURNAL OF GREENHOUSE GAS CONTROL 5, 658-663 (2009) (applying a discount rate to CCS risk). Although deciding to take on that risk would be rational from this economic perspective, the small risk could still have a constitutionally impermissible consequence: bankrupting the state with liability. That is, the state constitutional limitation disallows spending risks which could bankrupt the state, and CCS poses such a risk. Second, states and local entities seem to engage in such risky activity often, e.g. New York City is rebuilding the World Trade Center despite the risk of a terrorist attack. The distinction between this example and CCS is the presence of a private party. States can engage in such risky activity on their own behalf, but they cannot do so to aid a private party. See Pinsky, *supra* note 1, at 283-84 (discussing a similar distinction between “proprietary risk” and “enterprise aid risk”).

¹⁴² IL and TX’s hard-fought competition over FutureGen corroborates this, as does NY’s proposal to attract CCS developers with indemnification. See *supra* note 38

¹⁴³ See, e.g. Klass and Wilson, *supra* note 11, at 107; accord Pacala and Socolow, *supra* note 4.

¹⁴⁴ NYSERDA REPORT at 48-52; IOGCC. Alternatively, the state could take title to the CO₂ at the time of capture, as opposed to after injection. See Texas S. B. No. 1461, enacted April 26, 2007.

¹⁴⁵ Briffault, *supra* note 21, at 917-18.

The third difference between CCS and other gift-clause approved financings is that the commitment of state resources is indefinite. The lifetime of private companies is far shorter than the long-term stewardship of a CCS project,¹⁴⁶ and so even a successful capital investment or loan would pale in durational comparison with the millennia of responsibility for CCS liability. This difference magnifies the policy concerns behind the first and second differences: an uncertain risk is extended indefinitely into the future, and the incentive for shifting costs onto the future is even greater.

A general characteristic of indemnification, however, might serve as a counterargument to the applicability of the gift clause here. Indemnification only potentially implicates public money, whereas other financing mechanisms surely involve putting state money forward. For indemnification to implicate public money, a lawsuit must be brought that results in a finding of liability.¹⁴⁷ This “gift” of a conditional benefit could constitute a lesser entitlement, and hence avoid the prohibitions of the gift clause.¹⁴⁸

This counterargument is unconvincing – the lending of state credit is necessarily a risk-based enterprise, and the state does not invest capital up front. That is, public money will only come into play if the borrower defaults on the loan. Indemnification operates the same way: liability must be found before opening the public coffers. The case law about “lesser entitlements” that

¹⁴⁶ Klass and Wilson, *supra* note 11, at 159 (“As the timeline for CCS projects (hundreds to thousands of years) is incongruous with the lifetime of a private entity, legislators and regulators must develop institutional structures to fund and manage CCS risks over the long term.”).

¹⁴⁷ See, e.g., *Amoco Oil Co. v. Liberty Auto and Electric Co.*, 810 A.2d 259 (Conn. 2002).

¹⁴⁸ See *Ruotolo v. State*, 83 N.Y.2d 248 (1994) (allowing tort claim against state by private individuals did not violate gift clause, since State only gave a lesser entitlement and not a tangible gift).

avoid implicating the gift clause is also distinguishable, as those cases typically involve “moral obligation” exceptions.¹⁴⁹

d. Other Financing Mechanisms do not have Constitutional Problems like Indemnification Does

The arguments suggesting that gift clauses should preclude state indemnification of CCS may not preclude states from supporting CCS development through other financing mechanisms. Revenue bonds or tax incentives could defray the costs of CCS without the state constitutional problems that indemnification faces.¹⁵⁰ This Note will evaluate these options and others at length below. Indemnification against long-term liability, however, provides the most financially attractive package to CCS “early movers.”¹⁵¹ “Early movers” are those coal companies that are pushing the envelope with CCS technology before it becomes widely used and commercially available.¹⁵² Subsidizing these companies is essentially subsidizing the research and development of CCS technology, so that it can become commercially available more quickly.¹⁵³ Revenue bonds, compensation funds, insurance pools, and subject-to-appropriation debt are all ways to subsidize that technology, but they do not provide the same degree of certainty or efficiency that indemnification does.¹⁵⁴ Essentially, they offer a buffer

¹⁴⁹ *Ruotolo*, 83 N.Y.2d at 259 (“If the waiver of immunity from liability imposed by the Legislature rests on an adequate moral obligation, then the bypass does not offend the no-gift prohibition.”).

¹⁵⁰ See *infra* IV (evaluating the different available financing mechanisms)

¹⁵¹ NYSERDA REPORT 43-45 (describing the uncertainty of long-term liability as particularly troubling for early movers); Texas and Illinois also adopted indemnification regimes.

¹⁵² See *Klass and Wilson*, *supra* note 11, at 108 (distinguishing between nascent and mature CCS); NYSERDA REPORT at 48-52 (describing separate regulatory regimes for “early movers” and mature CCS).

¹⁵³ IOGCC at 9-11; NYSERDA REPORT at 60-62 (“CCS projects, particularly those involving coal fired power plants, present a variety of significant financial and market risks that could significantly delay deployment.”).

¹⁵⁴ See *Briffault*, *supra* note 21, at 926 (“[These methods] limit the recourse of lenders seeking principal and interests payments to certain funds. As a result they present a slightly greater risk to investors, and thus usually carry a slightly higher interest rate than general obligation bonds. They also involve greater administrative and legal costs...”).

against catastrophic risk, and might indeed cover the liability for an entire incident, but they do not guarantee full coverage.¹⁵⁵ Even if these lesser subsidies would be sufficient to induce an early mover to commence a CCS demonstration project, indemnification would still act as a bargaining option in the competition among states for these early mover projects.

III. Strict Gift Clauses Strike Down Indemnification; Other Solutions

To illustrate these arguments, this Note will analyze the law of a state that still retains a strict gift clause, New York. New York also has a current proposal to indemnify CCS developers. After concluding that strict gift clauses do prohibit indemnification of CCS, this Note will turn to the more liberal gift clauses that allow exceptions for public purposes and find that these gift clauses do not prohibit indemnification of CCS.

This section describes the state of New York's current CCS indemnification proposal. It then synthesizes New York's complex gift clause jurisprudence, concluding that New York's Constitution does not allow for a public purpose exception and that the credit clause problem cannot be overcome by providing consideration. This section also analyzes the New York proposal's suggested precedents for the constitutionality of indemnification: the Brownfield Cleanup Program (BCP) and the plugging of oil and gas wells. The BCP is a state program that incentivizes development of contaminated real property which developers might otherwise ignore. The program offers financial incentives and a release of the state's claims related to the contaminated property. The oil and gas well procedure involves a similar release of claims by the state when a permittee caps and closes a well. This section argues that these precedents fail to

¹⁵⁵ See Briffault, *supra* note 21, at 922; *see generally* N.Y. STATE MORELAND ACT COMM'N, RESTORING CREDIT AND CONFIDENCE: A REPORT TO THE GOVERNOR ON THE URBAN DEVELOPMENT CORPORATION AND OTHER STATE FINANCING AUTHORITIES (1976) (describing how New York's general revenues were necessary to bail out the Urban Development Corporation).

provide analogous and persuasive justifications of CCS indemnification. This section then offers and rebuts an additional precedent: eminent domain cases with public purpose exceptions.

After concluding that CCS indemnification is unconstitutional in New York, this section proposes and evaluates several other policy options: revenue bonds with a damage cap, subject-to-appropriation debt, indemnification by a public authority, a state-run insurance regime, and a state constitutional amendment via referendum. While all of these suggestions entail either greater delay, greater cost to the state, or less protection for the private developer, the suggestion of a revenue bond system with a damage cap comes closest to providing the benefits of the indemnification proposal. This section then analyzes the constitutionality of indemnification under liberal clauses, and finds it constitutionally permissible. The availability of indemnification to some states and not others creates an unfair playing field, resulting in a possible “race to the bottom” problem. To close, this section argues that gift clause differences among states leads to serious problems with CCS development and the response to global warming. In light of these problems, this note recommends federal intervention, such as a federal statute preempting state constitutional limitations on CCS indemnification.

a. New York’s Indemnification Proposal

The New York State Energy Research and Development Authority (NYSERDA) published a draft report in July 2009 about CCS in New York.¹⁵⁶ The report analyzes the costs, risks, and benefits of CCS, and it posits several policy proposals to encourage CCS development in New York.¹⁵⁷ The primary proposal, based on placement in the report and the amount of space that it’s given, seems to be a bifurcated indemnification system, in which early movers receive a

¹⁵⁶ NYSERDA REPORT.

¹⁵⁷ NYSERDA REPORT at 72-75.

better financial package than the average commercial user of CCS expected to exist in the future.¹⁵⁸ For early movers, project sponsors would be indemnified against all third-party claims and “the statute would expressly provide that project vendors, suppliers and other third parties providing CCS technologies, services or CO₂ injectate materials would be granted a statutory exemption from liability”, the statute would also exempt CO₂ from state waste laws and would provide protection against negligence and abnormally dangerous activities by adding an “intentional misconduct” element. For mature projects, a more detailed regime would be in place, which would have several requirements for the operational and closure phases of the project, but would ultimately result in the state taking title to the CO₂ and indemnifying the project sponsor and third parties. The report also suggests bond, pooling, and insurance options.¹⁵⁹

Gift clause concerns also appear in the report, which, after a brief treatment of the relevant legal arguments, are dismissed.¹⁶⁰ Analogizing CCS indemnification to the New York Brownfield Cleanup Program and the plugging of natural gas wells, the report authors argue that constitutional problems will be avoided since the proposed indemnification law would be generally applicable and for a public purpose.¹⁶¹ These arguments gloss over important subtleties of gift clause jurisprudence, such as the importance of the specific financial instrument

¹⁵⁸ NYSERDA REPORT at 48-52.

¹⁵⁹ NYSERDA REPORT at 52-59.

¹⁶⁰ NYSERDA REPORT at 45-48.

¹⁶¹ NYSERDA REPORT at 45-48 (“Th[e gift clause] has been interpreted by the legislature and New York courts, to allow indemnification by the state only if the indemnification provided is broadly conferred to a class of persons and not a single private person or corporate entity. Relevant indemnification precedents in New York that are consistent with this constitutional provision are discussed below and the liability recommendations that follow are consistent with that precedent.”).

involved in subsidizing the private company. For example, plugging natural gas wells uses a bonding system, not indemnification.¹⁶²

b. New York's Gift Clause Jurisprudence

Gift clause jurisprudence in New York is strict and forceful, and has not fallen prey to the modern era's near-total enervation of the gift clause. The New York Court of Appeals has sternly rejected the public purpose exception to the gift clause:

“However important, however useful the objects designed by the legislature, they may not be accomplished by a gift or a loan of credit to an individual or to a corporation. It will not do to say that the character of the act is to be judged by its main object – that, because the purpose is public, the means adopted cannot be called a gift or a loan.”¹⁶³

¹⁶² NYSEDA REPORT at 47-48; ECL §23-0305 (8)(d), (e) and (k); 6 NYCRR Part 555.

¹⁶³ *People v. Westchester County Nat'l Bank*, 231 N.Y. 465 (1921). The Court of Appeals expounds the argument against the public purpose exception more fully: “We find, therefore, among others, two limitations imposed on the legislature in addition to the one that was always implied. They both relate to gifts or loans either of the credit or the moneys of the state. ‘The credit of the state shall not in any manner be given or loaned to or in aid of any individual.’ (Art. 7, sec. 1.) ‘Neither the credit nor the money of the state shall be given or loaned to or in aid of any private undertaking.’ (Art. 8, sec. 9.) They both also represent the triumph of efforts to prevent improvidence, to make useless any pressure from special interests, to safeguard the credit of the state, and the interests of the people as a whole. They are not to be brushed aside. They are to be fairly construed to obtain the object for which they were intended. As in 1846 so to-day economy, public and private, is one of our pressing needs. Upon it depends the prosperity of the state and its inhabitants. The crushing load of taxation -- national, state and municipal -- now as then threatens our future -- the future of him who pays no direct taxes as well as the future of him who does. Now as then great expenditures may be lightly authorized if payment is postponed. To place the burden upon our children is easy. Nor do we scrutinize so closely the expenditures to be made if that be done. We all recognize this tendency in private life. We incur a future obligation cheerfully, where we would hesitate had we to pay the cash. It is true in public matters. The pressure which will come when the obligation matures is ignored. Conscious of this human weakness, to guard against public bankruptcy the people thought it wise to limit the legislative power. The courts must see to it that their intentions are not frustrated or evaded. And this is true even if the action questioned seems to be approved by the voters. One of the chief objects of the Constitution is the protection of minorities against the hasty acts of the majority. It expresses the well-considered, unimpassioned and deliberate judgment of the people. It is not to be amended informally.” *People v. Westchester County Nat'l Bank*, 231 N.Y. 465, 475 (N.Y. 1921).

As recently as 2008, the gift clause prevented continuation of litigation by the Attorney General where the Attorney General sought a money judgment that would benefit solely a corporation that switched from non-profit status to private status.¹⁶⁴

There appear to be some exceptions to the gift clause, but, upon further investigation, they are extremely narrow and do not support the constitutional validity of CCS indemnification. The apparent instances of a public purpose exception have specific constitutional exemptions or resolve the gift clause inquiry before discussing public policy. For example, compensation for constitutional takings does not constitute a gift because takings are provided for in the New York Constitution.¹⁶⁵ The same holds true for state funding of the removal of railroad grade crossings.¹⁶⁶ The one public purpose case without a specific constitutional exemption holds that there is no gift, because the money can be deemed additional compensation to state employees.¹⁶⁷ “Moral obligation” cases also present a narrow exception to the gift clause, but these typically involve a waiver of sovereign immunity for a single party.¹⁶⁸

One particularly misleading example of a public purpose exception appears in a 1979 attorney general opinion.¹⁶⁹ It should be noted that attorney general opinions do not share the

¹⁶⁴ *People v. Grasso*, 861 N.Y.S.2d 627 (App. Div. 1st Dep’t 2008) (construed statute narrowly by disallowing continuation of litigation by the Attorney General where allowing continuation of litigation would cause problems under the gift clause).

¹⁶⁵ *Tennessee Gas Transmission Co. v. State*, 299 N.Y.S.2d 578 (App. Div. 3d Dep’t 1969) (holding that compensation provided for a taking does not violate gift clause).

¹⁶⁶ 1952 Ops Atty Gen Jan 2. (finding that elimination of a railroad grade crossing is for the public benefit and that the state’s payment of this cost does not violate the gift clause, whereas state payment for railroad improvements not essential to the public good was a violation). N.Y. CONST. art. VII, § 14 specifically authorizes the use of public funds for the elimination of railroad grade crossings.

¹⁶⁷ *Frontier Ins. Co. v. State*, 146 Misc. 2d 237 (Ct. Cl. 1989), *aff’d* 576 N.Y.S.2d 622 (App. Div. 3d Dep’t) (finding that plan to pay university medical school faculty extra for work in private practice did not constitute a gift because payment was deemed additional compensation). The language about promoting the public welfare is dicta and is an alternative justification for the state indemnification plan for the employees, should the indemnification not also be deemed additional compensation. *Frontier Ins. Co.*, 146 Misc. 2d at 246.

¹⁶⁸ See, e.g., *Ruotolo v. State*, 83 N.Y.2d 248 (1994).

¹⁶⁹ 1979 Ops Atty Gen Aug 17.

same precedential effect as court decisions. When an agency asks a particular question, the Attorney General can answer that question with a formal opinion, which will bind that particular agency and the Attorney General's enforcement authority.¹⁷⁰ Specifically, an Attorney General cannot argue against a previous attorney general opinion without some intervening cause like a new statute.¹⁷¹ The opinion also acts as persuasive authority for courts, but courts have vacated attorney general opinions before.¹⁷²

The relevant opinion was issued by the Attorney General in response to the New York State Office of Parks and Recreation's request for a ruling on whether the use of public money to restore a historic city hall building would violate the gift clause, where the restoration would proceed by leasing the building to a private developer who would obtain title to the building in thirty years.¹⁷³ The text of the opinion makes it appear that a public purpose exonerates any project from gift clause prohibitions: "The question has arisen whether the above-described arrangement violates either section 8 of Article VII of the State Constitution or section 1 of Article VIII thereof.... It may be stated unequivocally at the outset that historic preservation is a valid public purpose."¹⁷⁴ Later, the opinion takes this position more explicitly: "The Constitution is suffused with prohibitions against the exercise of public power for private benefit,

¹⁷⁰ See generally Peter E. Heiser, Jr., *The Opinion Writing Function of Attorneys General*, 18 IDAHO L. REV. 10 (1982); Andrew Bennett, "Opinions," a Chapter from a forthcoming treatise on state attorneys general to be published by the National Association of Attorneys General.

¹⁷¹ See generally Heiser, *supra* note 170; Bennett, *supra* note 170.

¹⁷² See, e.g., *Aid for Women v. Foulston*, 427 F. Supp. 2d 1093 (D. Kans. 2006) (enjoining opinion of Kansas Attorney General where the court found that the Attorney General's opinion was inconsistent with the clear language of the statute being interpreted). Also, it should be noted that this opinion process is somewhat akin to the Department of Justice's Office of Legal Counsel opinion process, with which some readers might be more familiar.

¹⁷³ 1979 Ops Atty Gen Aug 17 at 1-2.

¹⁷⁴ 1979 Ops Atty Gen Aug 17 at 2.

yet it is well established that incidental private benefit will not invalidate a project which has for its primary object a public purpose.”¹⁷⁵

The specific context of this problem is implicit in the opinion’s public-purpose rationale for rejecting the gift clause argument. All of the cases that the Attorney General cited in support for this rationale deal with eminent domain and condemnation, which is the appropriate context for this factual situation and which rightly requires a public purpose.¹⁷⁶ The Attorney General also analogizes this situation to the specific constitutional authorization of using public funds for urban renewal.¹⁷⁷ Even the broadest language endorsing a public purpose carve-out to the gift clause turns on a specific constitutional approval. Thus, the public purpose rationale in favor of CCS indemnification fails to satisfy constitutional requirements.

c. NYSERDA’s Precedents Fail to Justify CCS Indemnification

The analogy to the Brownfield Cleanup Program (“BCP”) also fails to support the constitutionality of CCS indemnification. The BCP gives private parties tax incentives and a release from liability when they develop a contaminated property, which would likely not be developed otherwise.¹⁷⁸ The tax incentives raise no constitutional issue, as the BCP is a law of general applicability with a public purpose and hence is a valid subsidy.¹⁷⁹ The constitutionality of the liability release can be established under a consideration theory: the private party makes a

¹⁷⁵ 1979 Ops Atty Gen Aug 17 at 2.

¹⁷⁶ 1979 Ops Atty Gen Aug 17 at 2-3; *See, e.g., Denihan Enterprises, Inc. v. O’Dwyer*, 302 N.Y. 451, 458 (1951) (discussing the public purpose requirement for the use of eminent domain).

¹⁷⁷ 1979 Ops Atty Gen Aug 17 at 3. *See generally* N.Y. CONST. art XVIII; *Yonkers Community Development Agency v. Morris*, 37 N.Y.2d 478, 483 (1975).

¹⁷⁸ *See generally* NY ECL §§ 27-1401 *et seq.*

¹⁷⁹ *See* N.Y. CONST. art XVI (“Exemptions from taxation may be granted only by general laws.”).

voluntary promise to clean up a contaminated site in exchange for indemnification.¹⁸⁰ The consideration theory is only valid here because the state releases only its claims against the private party, and does not indemnify the private party against third-party claims, which means that the state's debt is not involved.¹⁸¹ NYSERDA's indemnification proposal does not contain such a voluntary promise by the private party, which must comply with climate laws.¹⁸² The BCP also fits into the framework of constitutionally authorized urban-renewal,¹⁸³ which CCS does not share.

NYSERDA's analogy to oil and gas wells also fails to justify indemnification under the gift clause. In New York, private parties who own oil or gas wells can apply for a plugging and abandonment permit ("permit") from the state Department of Environmental Conservation.¹⁸⁴ The private party, upon being granted a permit, can abandon the well.¹⁸⁵ The state releases its claims against the private party, with the narrow exception of re-plugging and restoration work of the surrounding land.¹⁸⁶ As with the BCP, the state is voluntarily releasing its claims here, and is not indemnifying the private party against third-party claims. The state thus incurs no "debt" in the gift clause sense, i.e. it has no credit on the line with regard to the private party.

¹⁸⁰ See 1948 Ops Atty Gen Jan 28 (finding that adequacy of consideration can alleviate potential gift clause problems).

¹⁸¹ See *infra* III.e for an argument about applicability of consideration to the credit clause; NY ECL § 27-1421 (describing the state's release of claims against the private party).

¹⁸² This argument assumes that climate regulations would be in place. In New York, such regulations do exist with the Regional Greenhouse Gas Initiative, but that legal background does not yet exist in all states. The voluntariness is also somewhat qualified, since the private party could also buy emission allowances. Furthermore, sequestration is not currently required, and likely only would be required once the technology is readily available. Nevertheless, general compliance with climate regulations remains involuntary.

¹⁸³ N.Y. CONST. art. XVIII.

¹⁸⁴ NYSERDA REPORT at 48: General authority for the regulation of this activity with respect to oil and gas wells is set forth at ECL §23-0305 (8)(d), (e) and (k); authority to regulate these activities with respect to solution mining wells is set forth at 23 ECL 0305 (9). Regulations implementing the P&A permit program are set forth at 6 NYCRR Part 555.

¹⁸⁵ NYSERDA REPORT at 47-48.

¹⁸⁶ NYSERDA REPORT at 48.

d. Eminent Domain's Public Purpose Requirement is Not Analogous and Does not Support the Constitutionality of CCS Indemnification

The use of eminent domain in New York has recently resulted in litigation where the public benefit provided by eminent domain coincides with benefit to a private party.¹⁸⁷ For example, the government entity might remove “blight” from a neighborhood while simultaneously enriching a private developer.¹⁸⁸ In New York, these uses of eminent domain are upheld if there is a valid public purpose.¹⁸⁹ Indemnifying CCS developers could benefit from a similar rationale: the overriding public purpose of fighting climate change trumps any incidental private benefit.

The differences between the application of gift clauses and eminent domain to CCS indemnification quickly overshadow the similarities. First, gift clauses and eminent domain are dealt with in separate articles of the New York Constitution.¹⁹⁰ Eminent domain has textually explicit terms for the use of money that benefits private parties, whereas the gift clause contains no such textual public purpose exception. Second, a public purpose requirement is inherently within the gift clause, but it serves only as a necessary condition to avoiding the gift clause, not a

¹⁸⁷ *Matter of Goldstein v. New York State Urban Development Corp.*, 2009 N.Y. Slip Op 08677 (N.Y. 2009) (upholding use of eminent domain that benefitted a private developer where finding of blight provided valid public purpose), available at <http://www.nycourts.gov/ctapps/decisions/2009/nov09/178opn09.pdf>; *Matter of Kaur v. New York State Urban Development Corp.*, 2009 NY Slip Op 08976 (App. Div. 2009) (holding that Columbia University, a private institution, cannot benefit from eminent domain where there is no valid public purpose; specifically, no finding of blight) available at http://www.courts.state.ny.us/reporter/3dseries/2009/2009_08976.htm.

¹⁸⁸ See e.g., *Kelo v. City of New London*, 545 U.S. 469 (2005) (finding that economic development, primarily benefitting private parties, was a public purpose sufficient to justify a constitutional taking, because the taking also benefitted the city).

¹⁸⁹ *Goldstein. Cf. Kaur* (no finding of blight).

¹⁹⁰ See N.Y. CONST. art VII, § 8, para. 1 (gift clause); *Cf.* N.Y. CONST. art. XVIII, § 6 (terms on which public money and debt can be given to private parties); N.Y. CONST. art. I, § 7 (public purpose requirement for eminent domain).

sufficient condition.¹⁹¹ That is, an appropriation of public money must first serve a public purpose, and then it must satisfy the additional restrictions of the gift clause. Third, New York courts have not previously employed these provisions of the New York Constitution in aid of interpreting the other, suggesting their distinctiveness.¹⁹² The analogy to eminent domain fails to lend support to the constitutionality of CCS indemnification in New York.

e. Consideration as a Way to Escape the Gift Clause?

With this clarification of the gift clause doctrine in New York, it seems highly unlikely that CCS indemnification will escape the gift clause by reason of its public purpose. The only remaining doctrinal escape-hatch for CCS indemnification is the argument that indemnification does not constitute a gift, either because it is a “lesser entitlement” or because the private company provided adequate consideration.¹⁹³ The adequate consideration argument is essentially one of categorization – the state cannot be giving a gift to a private entity if it is striking a bargain.¹⁹⁴ Indemnification, then, could be seen as a sort of liability insurance, where the consideration for the liability protection is the payment of a premium. Surely insurance companies do not give a gift of liability protection whenever an individual purchases a policy.¹⁹⁵ As the NYSERDA plan currently stands, however, there is no premium. The coal company

¹⁹¹ *Westchester County Nat’l Bank*, 231 N.Y. at 465, 475.

¹⁹² *See supra* nn. 158-163.

¹⁹³ The “lesser entitlement” argument was rejected above as an alternate justification in a “moral obligation” case. *See supra* note 145 and accompanying text. Nevertheless, the courts have yet to reject this argument and it is one potential route for a defense of CCS indemnification.

¹⁹⁴ 1948 Ops Atty Gen Jan 28 (finding that adequacy of consideration can alleviate potential gift clause problems); 1979 Ops Atty Gen Aug 17 at 2; *Admiral Realty Co. v. New York*, 206 N.Y. 110, 136 (1912) (“The city constructs and leases its subways to the company for a consideration or rental to be paid from the net earnings and it affords to its lessee an opportunity to derive profit from the lease by receipt of a like share of such earnings. There is no gift or loan in this, but an ordinary contract for a consideration just as valid in the case of a municipality as in the case of an individual.”).

¹⁹⁵ 1-1 Appleman on Insurance § 1.07 (describing the purchase of an insurance policy as a contract in which the payment of premiums is exchanged for insurance coverage).

would provide a surety or bond to cover the cost of operation, maintenance, and monitoring, but there is no additional consideration in exchange for the indemnification.¹⁹⁶

Furthermore, consideration might solve the problems with regard to the “gift” but not with regard to the state’s lending of credit. That is, the lending of credit to a private party is a conceptually distinct prong of the gift clause, and is disallowed even if it is part of an otherwise valid bargain.¹⁹⁷ The history of credit limitations in gift clauses supports this proposition: states struck deals with railroad companies by investing in them and guaranteeing their debt, in hopes of a return and a public benefit.¹⁹⁸ Even if coal companies offered something extra in consideration for the indemnification, it would not overcome the catastrophic risk assumed by the state.¹⁹⁹

These strict gift clause provisions put New York and other states with strict gift clauses and credit limitations at a disadvantage compared to those states with public purpose exceptions or without gift clauses altogether. Those states which could indemnify coal companies for CCS liability could provide the certainty needed to develop CCS and the financial incentives to locate in that state once CCS is developed.²⁰⁰ As stated above, this could create a “race to the bottom,”

¹⁹⁶ NYSERDA REPORT at 48-52. Alternatively, the utility could be charged a premium for the indemnification, which would be analogous to an insurance policy. This alternative will be discussed below. *See infra* Part III.e.3.

¹⁹⁷ *See* Pinsky, *supra* note 21, at 277-80 (distinguishing “credit clauses,” “stock clauses,” and “current appropriations clauses” as distinct variations of the gift clause).

¹⁹⁸ *Id.* at 277-282; Briffault, *supra* note 21, at 910-12.

¹⁹⁹ This claim assumes, of course, that the coal company would not set up some sort of bond, as consideration, which would cover all potential liability.

²⁰⁰ IOGCC REPORT at 10 (“Development of these model laws and regulations for geologic storage facilitates more states beginning to put in place this critical legal and regulatory infrastructure for CO₂ storage. This should enable timely and responsible development of CO₂ geologic storage projects and, concomitantly, the continued development of CO₂ geologic storage technology.”); ELIZABETH J. WILSON, MANAGING THE RISKS OF GEOLOGIC CARBON SEQUESTRATION: A REGULATORY AND LEGAL ANALYSIS 10-15 (unpublished dissertation) (2004), available at: http://people.ucalgary.ca/~keith/Thesis/Wilson_2004_Thesis.pdf (describing areas of legal uncertainty that must be resolved for proper risk management).

with incentives to choose riskier sites in states that have less regulation.²⁰¹ Without incentives to choose safe sites, coal companies could put these states in a perilous situation: a state's bet on indemnification could easily turn ruinous, with an accident at a risky site.²⁰²

f. What New York Can Do

This subsection posits and evaluates several constitutional alternatives to indemnification. First, the most promising option, this subsection proposes the use of revenue bonds or a special fund in conjunction with a damage cap, which provides the requisite investment certainty that CCS developers desire while avoiding the risk of catastrophic debt for the states. This proposal, however, has the unfortunate disadvantage of limiting compensation in the case of an accident. Second, this subsection proposes the use of subject-to-appropriation debt, which is clearly constitutional but does not provide much certainty for the private developer. Third, this subsection proposes the creation of a state-run insurance program for CCS developers. While this option could work with a mature CCS market and many participants, it is likely inadequate for early movers. Fourth, the state could amend the constitution to allow CCS indemnification. This proposal would allow indemnification, with all of its benefits, but would come at the cost of delay and uncertainty.

1. Revenue bonds/Special Funds with a Damage Cap

Revenue bonds provide states a way to lend their credit without putting all of that credit on the line, i.e. the credit is secured only by money from a specific fund, not from the state's general

²⁰¹ See *supra* nn. 89-90 and accompanying text (describing interstate competition problem)

²⁰² See Klass and Wilson, *supra* note 11, at 155 (claiming that broad indemnity provisions in the IL and TX statutes "arguably fail to create sufficient incentives for safe site selection or to compensate for potential harm").

revenues.²⁰³ Typically, states would issue bonds that create a revenue pool for a specific project, e.g. building a highway.²⁰⁴ Should the state need to pay a debt related to that project, the money would be drawn from that pool. Although New York has no case law on the relationship of that fund to the project,²⁰⁵ some states have adopted a nexus-based test for the relationship between the fund and the project. For example, taxes on motor vehicles and drivers' licenses could fund a highway project.²⁰⁶ Analogously, taxes on energy or revenue from carbon allowances could fund New York's indemnification of coal companies.²⁰⁷

This means of securing the indemnification still presents some troublesome uncertainties. First, the amount raised from taxes, bonds, or some combination thereof might not be sufficient to cover the entire liability. If this situation arose, then a party with a valid claim would go uncompensated for the consequences of the accident.²⁰⁸ Second, this method is constitutionally questionable,²⁰⁹ and, if struck down by a court, could place coal companies in the perilous position of having to pay a debt that they did not anticipate.²¹⁰ These problems are compounded by attempts to solve them: if the state were to put its full credit on the line as a secondary or

²⁰³ Briffault, *supra* note 21, at 918.

²⁰⁴ Briffault, *supra* note 21, at 919.

²⁰⁵ New York does have some case law about specific funds: *Robertson v Zimmermann*, 268 NY 52, 62 (1935) (upholding debt secured solely by revenues from a public authority). *Cf. Newell v People*, 7 N.Y. 9, 93 (1852) (striking down as evasive the use of canal bonds to fund a canal project).

²⁰⁶ Briffault, *supra* note 21, at 919.

²⁰⁷ At first glance, this solution might resemble an insurance scheme, in which the coal companies would be contributing to a common fund that would cover the liability for an individual accident. Actually, though, this common fund could be subsidized by other sources of GHG emissions, since energy taxes or revenue from carbon allowances extend to sources of energy other than coal. An economy-wide carbon tax could also be imposed.

²⁰⁸ *See, e.g., Frank v. Meadowlakes Dev. Corp.*, 20 A.D.3d 874, 881-82 (N.Y. App. Div. 2005) (noting that if "the [liable] indemnitor is insolvent or defunct, the party entitled to indemnification will not be made whole.").

²⁰⁹ *See* Briffault, *supra* note 21, at 919 (finding that cases on specific revenue sources as debt security are not consistent). One possible reason to strike down a revenue bond plan would be a textual interpretation of a credit clause, e.g. the clause disallows any state "debt," not just debt backed by the state's entire general revenue.

²¹⁰ *See generally Itri Brick & Concrete Corp. v. Aetna Cas. & Sur. Co.*, 680 N.E.2d 1200 (N.Y. 1997) (finding an indemnification agreement invalid, making the proposed indemnitee liable for his negligence).

tertiary (assuming an initial federal layer of protection) security, the indemnification would be even more questionable as a constitutional matter.²¹¹

The state legislature could institute a damage cap to limit the amount of state debt at issue. By coupling a damage cap and a revenue bond system, the state could avoid constitutional difficulties while providing financial certainty to coal companies. The damage cap assures constitutionality by limiting the amount of debt at issue, much like subject-to-appropriation debt.²¹² The cap also assures that the coal company would not be held liable for any part of an accident, since the indemnification would cover the amount of damages within the cap.²¹³ The only downside to this strategy is that any victims of an accident might be arbitrarily cut off from their due compensation by the damage cap.²¹⁴

2. Subject-to-appropriation debt

Subject-to-appropriation debt involves the issuance of debt, e.g. indemnification, by a public authority or entity that is subject to yearly appropriation.²¹⁵ That is, the security for the debt is the public authority's budget, which means that the general revenues of the state are not committed to the project. States are likely to continue to provide yearly appropriations, so this

²¹¹ The shell of a specific revenue pool might nominally limit the state's liability enough to pass constitutional muster, but even this arrangement does not have the safety valve of being subject-to-appropriation. See Briffault, *supra* note 21, at 921. The presence of a legal obligation, as opposed to yearly appropriation, seems determinative for NY courts. See *Schulz v. State*, 84 N.Y.2d 231, 249-50 (1994).

²¹² See Briffault, *supra* note 21, at 920-25 (“[B]y nominally limiting its liability, the state or local government avoids creating ‘debt.’”). Professor Briffault gives several examples from the case law: *Carr-Gottstein Props. v. State*, 899 P.2d 136 (Alaska 1995); *In re Anzai*, 936 P.2d 637 (Haw. 1997); *Wilson v. Ky. Transp. Cabinet*, 884 S.W.2d 641 (Ky. 1994); *Employers Ins. Co. of Nev. v. State Bd. of Exam'rs*, 21 P.3d 628 (Nev. 2001); *Schulz v. State*, 639 N.E.2d 1140 (N.Y. 1994); *Fent v. Okla. Capitol Improvement Auth.*, 984 P.2d 200 (Okla. 1999); *Dykes v. N. Va. Transp. Dist. Comm'n*, 411 S.E.2d 1 (Va. 1991).

²¹³ See, e.g., Price-Anderson Act, 42 U.S.C. § 2210 (combining a damage cap with an indemnification regime).

²¹⁴ Price-Anderson Act, 42 U.S.C. § 2210.

²¹⁵ Briffault, *supra* note 21, at 920-25.

limitation on debt is mostly nominal.²¹⁶ Also, even though this proposal avoids credit clause prohibitions,²¹⁷ the state is still putting its credit rating at risk if a default occurs.²¹⁸ Furthermore, without the security of a legal obligation, there is still a risk of the CCS developer being left with the liability for a catastrophic accident that the public authority could not cover and that the state does not wish to pay. Overall, subject-to-appropriation debt provides some additional incentives and security to CCS developers, but less than indemnification or a revenue bond with damage cap regimes.

3. Insurance scheme

Since there is not yet comprehensive, commercially-available insurance for CCS, the state could create an insurance system to provide CCS developers with some security.²¹⁹ A central feature of insurance, however, is absent in this situation: the ability to assess risk properly.²²⁰ Low premiums might not cover the liability of an accident, and high premiums could deter CCS developers.²²¹ Also, in the early stages of development, the low number of early movers might prevent an insurance regime from functioning, since there would not be a large pool over which to spread risk.²²²

²¹⁶ *Id.* at 922

²¹⁷ *Schulz v. State*; Briffault at 922 (describing how at least 33 states use this method of financing to evade gift clause limitations).

²¹⁸ Briffault, *supra* note 21, at 922-23 (describing how Standard & Poor's will include defaults by public authorities in evaluation of the state's credit).

²¹⁹ *See generally* Mills, *supra* note 15 (describing the barriers to insurance for climate risk and how such insurance is currently unavailable). *Cf.* Illinois Public Act 095-0018 (SB 1704 enrolled) (considering the availability of insurance and requiring the state to purchase it if available).

²²⁰ *See generally* Mills, *supra* note 15.

²²¹ *See* Flatt, *supra* note 11, at 224-25. The cost differential between coal and other sources of energy might still result in coal remaining profitable despite quite high insurance premiums.

²²² *See* Flatt, *supra* note 11, at 224-25.

Despite these problems, the state could still create an insurance program, so long as it is subject to yearly appropriation and does not risk the state's entire revenue.²²³ This program, then, shares the same problems as subject-to-appropriation debt would: less financial certainty is provided to the industry, and the program is more costly to administer.²²⁴

4. State Constitutional Amendment/ Referendum for a specific debt

If a state with credit clause limitations wanted to indemnify a CCS developer, it could seek to pass a constitutional amendment or a targeted referendum allowing indemnification. New York's Constitution, for example, allows for constitutional amendments after a majority vote in each chamber of the state legislature and a majority vote of the people directly.²²⁵ Similarly, other states allow exceptions for specific debt projects if approved by a supermajority of the state legislature.²²⁶ Such a constitutional amendment could overturn the entire gift clause or specifically exempt CCS indemnification.

The downside to this plan is the delay inherent in the electoral process, i.e. a state would have to wait for an election year to consider such a referendum. In the mean time, other states might have already secured CCS developers. Even if the amendment is done solely within the legislature, that legislative process might still be slower than simply passing an incentive plan that is already constitutional.

g. Analysis of CCS Indemnification under Liberal Gift Clauses

²²³ See *supra* III.f.2 (discussing gift clauses and subject-to-appropriation debt).

²²⁴ See *supra* III.f.2 (discussing gift clauses and subject-to-appropriation debt).

²²⁵ N.Y. CONST. art. XIX, § 1.

²²⁶ See, e.g., R.I. CONST. art. 6, § 11.

The state constitutional analysis of CCS indemnification in those states that have less restrictive gift clauses is quite simple: the only issue is whether CCS indemnification meets the state's textual or judicially-created definition of a valid public purpose. Showing that CCS indemnification is a valid purpose should be an easy task, as it likely would increase employment or aid economic development,²²⁷ in addition to helping mitigate climate change. The fifty state survey in the Appendix to this Note provides more information for the analysis under other state constitutions.

Conclusion

Those states with gift clauses that are less restrictive than New York's will be able to provide more attractive financial incentive packages for CCS developers.²²⁸ In some states, public purpose exceptions extend to the lending of credit, which means that those states can offer indemnification.²²⁹ CCS developers will likely be drawn to these states, where the uncertainty and risk of liability loom less menacingly.²³⁰ As the example of New York demonstrates, some states will not be able to compete as well, which means that the fear of a "race to the bottom" finds strong grounding here.²³¹ First, CCS developers might not go to the states best equipped to handle CCS regulation and stewardship.²³² Second, this state competition might increase the risk

²²⁷ Briffault, *supra* note 21, at 913. *See also* nn. 113-115 and accompanying text.

²²⁸ *See supra* nn. 94, 100-103 (describing the CCS race to the bottom).

²²⁹ *See, e.g.*, ILL. CONST., art. VIII, § 1 ("Public funds, property or credit shall be used only for public purposes."); Illinois Public Act 095-0018 (SB 1704 enrolled) (indemnifying FutureGen, a private CCS developer).

²³⁰ Presence of coal-fired power plants and availability of appropriate geologic formations are likely more important considerations in siting a CCS project, but financial incentives would still play a role in the competition between states that meet those criteria. *See* Klass and Wilson, *supra* note 21, at 155 (claiming that legal incentives play a role in guiding the behavior of CCS developers when selecting sites); Wilson, *supra* note 196, at 10-15 (describing how legal regimes affect risk management of CCS developers).

²³¹ *See supra* nn. 94, 100-103 (discussing the race to the bottom problem with CCS).

²³² Wyoming, for example, is the top coal-producing state in the U.S. and has already started developing a CCS regulatory regime. *See supra* note 83 (describing Wyoming's CCS legislation). Its constitution and gift clause jurisprudence, however, resemble New York's, and indemnification of private parties is likely unconstitutional.

of bad site selection²³³ and ensuing CCS accidents.²³⁴ Third, the occurrence of CCS accidents or an increased perception of risk could severely hinder CCS development, much like the effect of public opposition to nuclear power.²³⁵

The effects of these state constitutional differences further substantiate the claim that the federal government needs to provide some uniform standard for CCS regulation. For a minimum level of involvement, the federal government could pass a law authorizing states to indemnify private companies, as a federal statute can preempt a state constitutional provision.²³⁶ This approach would allow fair competition among the states without extensive federal involvement.²³⁷ The federal government could also provide a uniform damage cap or indemnification provision, which would provide a fairer playing field for state competition.²³⁸ Many other federal options for liability protection and CCS regulation exist, and have been

WYO CONST. art. 16, § 6 (“Neither the state nor any county, city, township, town, school district, or any other political subdivision, shall loan or give its credit or make donations to or in aid of any individual, association or corporation[.]”); *Witzenburger v. State ex rel. Wyo. Community Dev. Auth.*, 575 P.2d 1100 (Wyo. 1978) (requiring state debt commitments to be subject to yearly appropriation in order to be held constitutional).

²³³ Kentucky, for example, passed legislation allowing FutureGen to bypass state administrative processes. Kentucky House Bill 665; *Kentucky's General Assembly passes bill aimed at attracting 'FutureGen' to the state*, GLOBAL POWER REP., March 30, 2006, available at 2006 WLNR 6222741.

²³⁴ Som, *supra* note 43, at 986 (“The most important step that can be taken to prevent leakage is to use only ideal storage sites.”) (citing M.A. De Figueiredo, D.M. Reiner & H.J. Herzog, *Framing the Long-Term In Situ Liability Issues for Geologic Carbon Storage in the United States*, 10 MITIGATION & ADAPTATION STRATEGIES FOR GLOBAL CHANGE 647, 648 (2005)).

²³⁵ Som, *supra* note 43, at 985.

²³⁶ U.S. CONST., art VI, par. 2 (“This Constitution, and the Laws of the United States which shall be made in Pursuance thereof... shall be the supreme Law of the Land; and the Judges in every State shall be bound thereby, any Thing in the Constitution or Laws of any State to the contrary notwithstanding.”); *See, e.g., Van Patten v. Jensen*, 112 Wn.2d 552 (Wash. 1989) (holding that federal regulations preempted a state constitutional provision).

²³⁷ *See* IOGCC at 9-11 (favoring a state-led approach to CCS regulation).

²³⁸ *See* Klass and Wilson, *supra* note 11, at 175-78 (arguing for a comprehensive federal regulatory framework, which could include damage caps). *Cf.* Klass and Wilson, *supra* note 11, at 168 (“[W]hile the use of a liability cap (such as that in the Price-Anderson Act) provides predictability for firms, it may also undermine the credibility of CCS in the eyes of the public. When CCS proponents expound on the safety of the technology while simultaneously lobbying for a damage cap, this contradictory position undermines CCS credibility.”).

discussed extensively elsewhere.²³⁹ Each option has its own policy complications, but the problems created by differing gift clauses call for some sort of federal resolution.

If CCS development is to go forward and become a valuable weapon in the fight against climate change, it will require financial encouragement and public support. The existence of and differences among states' constitutional gift clauses imperil the realization of both of those necessary conditions. States with a strong coal presence might not be able to provide the necessary financial support, and unfair interstate competition might lead to increased risk and public opposition. This note has suggested some ways in which states might come close to the financial incentives of indemnification, and has also suggested a federal statute preempting gift clauses limitations in this instance. The latter option gives states the freedom to compete for CCS developers or make themselves inhospitable to such development without the need of a cumbersome and dilatory constitutional amendment process.

²³⁹ See Klass and Wilson, *supra* note 11, at 149-78 (discussing multiple types of compensation systems, possible regulatory systems, and proposing a comprehensive federal regulatory system); Flatt, *supra* note 11, at 224-229 (discussing multiple options for liability protection and compensation).

Appendix: Provisional Analysis of 50 States' Gift Clause Jurisprudence, as Applied to CCS

This table provides information on the application of each state's gift clause jurisprudence to CCS indemnification. The table provides a citation to each state's gift clause provision(s), if the state has a gift clause. The table also locates any textual or judicial public-purpose exceptions. In the final column the table predicts the constitutionality of CCS indemnification in each state. It should be noted that this fifty state survey provides only a starting point for research and does not claim to offer definitive analysis of any state's law.

State	Gift clause provisions	Textual public purpose exception	Judicial public purpose exception	Constitutionality of CCS indemnification
Alabama	ALA.CONST. art. IV, § 94	No	<i>Board of Revenue and Road Com'rs of Mobile County v. Puckett</i> , 227 Ala. 374, 149 So. 850 (1933)	Likely
Alaska	ALASKA CONST. art. IX, § 6	Yes	<i>Dearmond v. Alaska State Development Corp.</i> , 376 P.2d 717 (Alaska 1962)	Likely
Arizona	ARIZ. CONST. art. IX, § 7	No	<i>Valley Nat. Bank of Phoenix v. First Nat. Bank of Holbrook</i> , 83 Ariz. 286, 320 P.2d 689 (Ariz. 1958)	Likely
Arkansas	ARK. CONST. art. XII, §§ 5, 7, art. XVI, § 1	No	No	Problematic
California	CAL. CONST. art. XVI, §§ 6 and 17	No	<i>Oakland v. Garrison</i> , 228 P 433 (Cal. 1924)	Likely
Colorado	COLO. CONST. art. V, § 34, art. XI, §§ 1 and 2	No for art. V, § 34 and art XI, § 1. Yes for art XI, § 2.	<i>In re Interrogatory Propounded by Governor Roy Romer on House Bill 91S-1005</i> , 814 P.2d 875 (Colo. 1991)	Likely
Connecticut	CONN. CONST. Art. I., § 1	No	<i>Barnes v. New Haven</i> , 98 A.2d 523 (Conn. 1953)	Likely
Delaware	DEL. CONST. art. VIII, §§ 4, 8	No	<i>Opinion of Justices</i> , 358 A.2d 705 (Del. 1976)	Likely

State	Gift clause provisions	Textual public purpose exception	Judicial public purpose exception	Constitutionality of CCS indemnification
Florida	FLA. CONST. art. VII, § 10	No	<i>Poe v. Hillsborough County</i> , 695 So. 2d 672 (Fla. 1997)	Likely
Georgia	GA. CONST. art. III, § VI, para. VI; art. VII, § IV, para. VIII	No	No	Problematic
Hawaii	HAW. CONST. art. VII, § 4	Yes	<i>State ex rel. Amemiya v. Anderson</i> , 545 P.2d 1175 (Haw. 1976)	Likely
Idaho	IDAHO CONST. art. VIII, §§ 2 and 4	No	<i>Nelson v. Marshall</i> , 497 P.2d 47 (Idaho 1972)	Likely
Illinois	ILL. CONST. art. VIII, § 1	Yes	<i>People ex rel. Douglas v. Barrett</i> , 370 Ill. 464, 19 N.E.2d 340 (Ill. 1939)	Likely
Indiana	IND. CONST. art. X, § 5, art. XI, § 12	No	No	Problematic
Iowa	IOWA CONST. art. VII, § 1 (State Debts), art. VIII, § 3	No	No	Problematic
Kansas	None	n/a	n/a	Yes
Kentucky	KY. CONST. §§ 171, 177, and 179	No	<i>Dannheiser v. City of Henderson</i> , 4 S.W.3d 542 (Ky. 1999)	Likely
Louisiana	LA. CONST. art. VII, Part I, §§ 1, 10 and 14	No	Op. Atty. Gen. No. 97-460, December 23, 1997	Likely
Maine	ME. CONST. art. IX, §§ 14 and 14-A	No	No	Problematic
Maryland	MD. CONST. art. III, § 34	No	<i>City of Frostburg v. Jenkins</i> , 215 Md. 9, 136 A.2d 852 (Md. 1957)	Likely
Massachusetts	MASS. CONST. Amend. art. 62	No	<i>In re Opinion of the Justices</i> , 57 N.E. 675 (Mass. 1900)	Likely

State	Gift clause provisions	Textual public purpose exception	Judicial public purpose exception	Constitutionality of CCS indemnification
Michigan	MICH. CONST. art IV, § 30;), art. VII, § 26; art. IX, §§ 18 and 19	No (but 2/3 vote can override)	<i>Falk v State Bar of Michigan</i> , 305 NW2d 201 (Mich. 1981)	Likely
Minnesota	MINN. CONST. art. XI, §§ 2 and 12	No	No	Problematic
Mississippi	MISS. CONST. Art. 14, § 258	No	No	Problematic
Missouri	MO. CONST. art. III, § 38(a)	Maybe (“excepting in aid of public calamity”)	<i>Fust v. Attorney General for the State of Mo.</i> , 947 S.W.2d 424 (Mo. 1997)	Likely
Montana	MONT. CONST. art. VIII, §§ 8, 10	No (but 2/3 legislative vote can create a debt)	<i>Willett v. State Board of Examiners</i> , 112 Mont. 317, 115 P.2d 287 (Mont. 1941).	Likely
Nebraska	NEB. CONST. art. XIII, § 3; art. XV, § 17	No	<i>Cosentino v. City of Omaha</i> , 183 N.W.2d 475 (Neb. 1971).	Likely
Nevada	NEV. CONST. art. 8, §§ 9 and 10	No	<i>Employers Ins. Co. v. State Bd. of Exmrs.</i> , 21 P.3d 628 (Nev. 2001).	Likely
New Hampshire	N.H. CONST. part Second, art. 5	No	<i>In re Opinion of Justices</i> , 190 A. 425 (N.H. 1936)	Likely
New Jersey	N.J. CONST. art. VIII, § II, para. 1, art. VIII, § III, paras. 2 and 3	No	<i>Roe v. Kervick</i> , 199 A.2d 834 (N.J. 1964).	Likely
New Mexico	N.M. CONST. art. IV, §§ 26, 31	No (but general applicability may validate the action)	No	Problematic
New York	N.Y. CONST. art. VII, § 8, paras. 1, 2, and 3	No	No	Problematic
North Carolina	N.C. CONST. art. V, § 3, paras. 2 and 3	No (but direct vote of people may validate action)	<i>Hinton v. Lacy</i> , 137 S.E. 669 (N.C. 1927).	Likely

State	Gift clause provisions	Textual public purpose exception	Judicial public purpose exception	Constitutionality of CCS indemnification
North Dakota	N.D. CONST. art. X, § 18	No	No	Problematic
Ohio	OHIO CONST. art. VIII, §§ 4, 6 and 13	No	No	Problematic
Oklahoma	OKLA. CONST. art. X, § 15	No	No	Problematic
Oregon	OR. CONST. art. XI, §§ 5, 6, 7 and 9	No	No	Problematic
Pennsylvania	PA. CONST. art. VIII, § 8	No	<i>Tosto v. Pennsylvania Nursing Home Loan Agency</i> , 460 Pa. 1, 331 A.2d 198 (Pa. 1975)	Likely
Rhode Island	R.I. CONST. art. 6, §§ 11, 16	No (but 2/3 vote may validate action)	<i>In re Advisory Opinion to Governor (DEPCO)</i> , 593 A.2d 943 (R.I. 1991)	Likely
South Carolina	S.C. CONST. art. X, § 11	No	<i>S.C. Farm Bureau Mktg. Ass'n v. S.C. State Ports Auth.</i> , 293 S.E.2d 854 (S.C. 1982).	Likely
South Dakota	None	n/a	n/a	Yes
Tennessee	TENN. CONST. art. II, § 31	No	<i>Ragsdale v. City of Memphis</i> , 70 S.W.3d 56 (Tenn.Ct.App.,2001)	Likely
Texas	TEX. CONST. art. III, §§ 50, 52	No	<i>Cross v. Dallas County Flood Control Dist. No. 1</i> , 773 S.W.2d 49 Tex.App.-Dallas,1989	Likely
Utah	UTAH CONST. art. VI, § 29	No	<i>Healthcare Services Group, Inc. v. Utah Dept. of Health</i> , 40 P.3d 591 (Utah 2002)	Likely
Vermont	VT. CONST. chap. I, art. 7	No	<i>Vermont Woolen Corp. v. Wackerman</i> , 167 A.2d 533 (Ver. 1961)	Likely
Virginia	VA. CONST. art. X, § 10	No	Unclear, <i>Almond v. Day</i> , 91 S.E.2d 660, 666-67 (Va. 1956)	Problematic
Washington	WASH. CONST. art. 8, §§ 5 and 7	No	No	Problematic

State	Gift clause provisions	Textual public purpose exception	Judicial public purpose exception	Constitutionality of CCS indemnification
West Virginia	W.VA. CONST. art. 10, § 9	No	No	Problematic
Wisconsin	None	n/a	n/a	Yes
Wyoming	WYO. CONST. art. 16 § 6	No	No	Problematic