

ADMINISTRATIVE LAW, FILTER FAILURE, AND INFORMATION CAPTURE

WENDY E. WAGNER†

ABSTRACT

There are no provisions in administrative law for regulating the flow of information entering or leaving the system, or for ensuring that regulatory participants can keep up with a rising tide of issues, details, and technicalities. Indeed, a number of doctrinal refinements, originally intended to ensure that executive branch decisions are made in the sunlight, inadvertently create incentives for participants to overwhelm the administrative system with complex information, causing many of the decisionmaking processes to remain, for all practical purposes, in the dark. As these agency decisions become increasingly obscure to all but the most well-informed insiders, administrative accountability is undermined as entire sectors of affected parties find they can no longer afford to participate in this expensive system. Pluralistic oversight, productive judicial review, and opportunities for intelligent agency decisionmaking are all put under significant strain in a system that refuses to manage—and indeed tends to encourage—excessive information. This Article first discusses how parties can capture the regulatory process using information that allows them to control or at least dominate regulatory outcomes (the information capture phenomenon). It then traces the problem back to a series of failures by Congress and the courts to require some filtering of the information flowing through the system (filter failure). Rather than filtering information, the incentives tilt in the opposite direction and encourage participants to err on the side of providing

Copyright © 2010 by Wendy E. Wagner.

† Joe A. Worsham Centennial Professor, University of Texas at Austin School of Law, and Professor, Case Western Reserve University School of Law. Contact: wwagner@law.utexas.edu. I am most grateful to Norman Silber for the opportunity to present an earlier draft of this Article at a faculty workshop at Hofstra Law School, where I received many helpful comments. Particular thanks are due to Natalie Bedoya, Lee Davis, Peter Gerhart, Katy Kuh, David Rubenstein, Norman Silber, Rena Steinzor, Rose Villazor, Vern Walker, and Will Walker for thoughtful comments on early drafts of the Article.

too much rather than too little information. Evidence is then offered to show how this uncontrolled and excessive information is taking a toll on the basic objectives of administrative governance. The Article closes with a series of unconventional but relatively straightforward reforms that offer some hope of bringing information capture under control.

TABLE OF CONTENTS

Introduction	1323
I. The Basics of Information Capture and Filter Failure.....	1328
A. The Basics of Information Capture.....	1329
B. Information Capture's Fit with Existing Theories	1334
C. Environmental Rulemakings and Their Susceptibility to Information Capture	1342
II. How Administrative Law Enables Information Capture.....	1351
A. Filter Failure in the Administrative Procedure Act.....	1353
B. Courts Encourage Information Excess.....	1355
1. Incentives for the Agencies to Conduct Informationally Excessive Rulemakings	1356
2. Parallel Incentives for Interest Groups to Engage in Information Capture	1362
C. Administrative Processes in the Shadows	1365
1. Participating in the Development of the Proposed Rule.....	1366
2. Renegotiating the Final Rule After Publication	1369
D. Administrative Law and Information: A Conceptual Summary	1371
III. Consequences.....	1372
A. Implications for Pluralistic Oversight	1374
1. The First Challenge for Pluralistic Oversight: Basic Imbalances in Resources and Information	1378
2. The Second Challenge for Pluralistic Oversight: Information Symbiosis between the Agency and Regulated Parties	1380
3. The Third Challenge for Pluralistic Oversight: Imbalances in Participation in Expensive Public Processes.....	1384
4. Reasons for Comfort? Possible Sources of Counterpressure Against Pluralistic Losses	1388
5. Summary	1396

B.	Other Adverse Consequences	1396
1.	Constrained Decisionmaking that Leads to Satisficing Rather than Comprehensive Regulatory Decisions	1396
2.	Strategic Uses of Information Capture that Pervert Open Government Processes.....	1399
3.	An Information Avalanche.....	1402
IV.	Reform.....	1403
A.	Reforms to Reinvigorate Pluralistic Engagement in Rulemakings	1406
1.	A Participation-Based Standard for Judicial Review ..	1406
2.	Appointed Advocates or Adjudicators to Replace the Lack of Balanced Engagement.....	1414
3.	Reinvigorating Representation of Underrepresented Groups Like the Diffuse Public Interest.....	1416
4.	Information Filters on Participants.....	1419
B.	Bypassing Adversarial Constraints: Policy in the Raw...	1422
C.	Competition-Based Regulation.....	1427
Conclusion.....		1431

INTRODUCTION

In the early 1970s, legal visionaries like Joseph Sax, Lynton Caldwell, and Ralph Nader pressed for a system of rules that would give the public greater access to administrative decisions.¹ Their battle against smoke-filled rooms populated only by well-heeled insiders bore fruit, and Congress adopted important reforms aimed at letting the sunshine in.

An explosion of laws followed, requiring open records,² rigorous processes for advisory groups,³ access to congressional deliberations,⁴ and demands that agencies go the extra mile to include all interested participants and to take their views into consideration.⁵ During this

1. See, e.g., JOSEPH SAX, *DEFENDING THE ENVIRONMENT: A HANDBOOK FOR CITIZEN ACTION* (1972); Lynton Caldwell, *The National Environmental Policy Act: Retrospect and Prospect*, 6 ENVTL. L. REP. 50,030 (1976); Ralph Nader, *Freedom from Information: The Act and the Agencies*, 5 HARV. C.R.-C.L. L. REV. 1 (1970).

2. Freedom of Information Act, 5 U.S.C. § 552 (2006).

3. Federal Advisory Committee Act, 5 U.S.C. app. §§ 1–16 (2006).

4. Government in the Sunshine Act, 5 U.S.C. § 552b (2006).

5. Negotiated Rulemaking Act, 5 U.S.C. §§ 561–70 (2006).

same time, the courts also stepped up their oversight of the agencies. Most notably, they expanded standing rules to enable public interest representatives to challenge agencies in court when agency rules diverge significantly from promises made by Congress.⁶

A few commentators have expressed misgivings about the trend,⁷ but the overwhelming majority views these reforms as important steps in the right direction. This is not surprising given that equal access, transparency, and judicial review are considered cornerstones of accountable government.⁸ Open government initiatives not only enhance oversight of agencies by affected groups, but also facilitate checks and balances within government itself.⁹

But every successful reform movement has its unintended consequences. What few administrative architects anticipated from the new commitment to “sunlight”¹⁰ was that a dense cloud of detailed, technical, and voluminous information would move in to obscure the benefits of transparency. And because rulemaking processes are by their very nature blind to the risks of *excessive*

6. See Richard B. Stewart, *The Reformation of American Administrative Law*, 88 HARV. L. REV. 1669, 1723, 1748 (1975) (documenting and critiquing the liberalization of standing rules and the resulting greater judicial oversight of agency rulemakings through what he calls the “interest representation model”).

7. Professor Stewart in particular expressed great skepticism that broad participation rights would transfer naturally to the vigorous representation of all interests affected by the regulatory proceedings. *Id.* at 1763; see also *id.* at 1803 (“Full implementation of the formal participation and standing rights that are central to the interest representation model of administrative law would enormously increase the expense of the administrative process and might, in practice, increase the barriers to participation by interests that are not well-organized or affluent.”).

8. See, e.g., STEPHEN G. BREYER ET AL., ADMINISTRATIVE LAW AND REGULATORY POLICY: PROBLEMS, TEXT, AND CASES 22–29 (6th ed. 2006) (describing administrative law’s chronological development since 1962, which highlights the importance of these principles in the contemporary evolution of administrative law).

9. Cf. 1 RICHARD J. PIERCE, JR., ADMINISTRATIVE LAW TREATISE § 7.9, at 668 (5th ed. 2010) (“It is simply impossible for the President even to be aware of all of the policy decisions agencies make. His staff assigned to this task is too small to engage in detailed scrutiny of all major policy decisions.”).

10. Justice Brandeis’ phrase, “sunlight is said to be the best of disinfectants,” see Louis D. Brandeis, *What Publicity Can Do*, HARPER’S WKLY., Dec. 20, 1913, reprinted in LOUIS D. BRANDEIS, OTHER PEOPLE’S MONEY AND HOW THE BANKERS USE IT 92, 92 (1914), has been repeated almost like a mantra in some administrative law and regulatory circles. See, e.g., Steven Aftergood, *Reducing Government Secrecy: Finding What Works*, 27 YALE L. & POL’Y REV. 399, 399 (2009) (quoting Brandeis and arguing that the notion of transparency is critical to the integrity of government); Paula J. Dalley, *The Use and Misuse of Disclosure as a Regulatory System*, 34 FLA. ST. U. L. REV. 1089, 1096 (2007) (“Commentators describing the origins of the disclosure requirements of the securities acts frequently quote Louis Brandeis, that ‘[s]unlight is . . . the best of disinfectants.’”).

information, committed as they are to the flow of information and expansive participation, a new phenomenon—called “information capture”—is taking hold.

In the regulatory context, information capture refers to the excessive use of information and related information costs as a means of gaining control over regulatory decisionmaking in informal rulemakings.¹¹ A continuous barrage of letters, telephone calls, meetings, follow-up memoranda, formal comments, post-rule comments, petitions for reconsideration, and notices of appeal from knowledgeable interest groups over the life cycle of a rulemaking can have a “machine-gun” effect on overstretched agency staff.¹² The law does not permit the agency to shield itself from this flood of information and focus on developing its own expert conception of the project. Instead, the agency is required by law to “consider” all of the input received.¹³

To make matters worse, as the issues grow more numerous and technical, less well-financed interest groups find it hard to continue participating in the process. They often lack the time, the resources, or the expertise to continue reviewing all of the information that becomes part of the rulemaking record. Yet as their engagement wanes, so does the pluralistic engine considered so fundamental to the administrative process. They can no longer provide a means of culling out extraneous information and other chaff from the rulemaking through their vigorous engagement. Incentives to load as much information as possible into the system, combined with a reduction in the number and diversity of affected parties participating in the rulemaking process,¹⁴ set the stage for information capture.

The root cause of information capture is not administrative law’s commitment to open government and transparency, but rather its failure to require participants to self-process the information they load into the system, termed “filter failure” here.¹⁵ In most social and legal settings, participants have meaningful incentives to process and hone the information they communicate. Most notably, they want to be sure that the desired message is communicated in an efficient and

11. It is possible that the information capture phenomenon also afflicts formal rulemakings in some ways, but these issues are beyond the scope of this Article.

12. JAMES LANDIS, REPORT ON REGULATORY AGENCIES TO THE PRESIDENT-ELECT 51 (1960).

13. 5 U.S.C. § 553(c) (2006).

14. *See infra* Part III.A.

15. *See infra* notes 21–23 and accompanying text.

effective way. Administrative law, by contrast, imposes almost no filtering requirements or incentives on any of the participants who engage in the rulemaking and instead produces strong incentives for precisely the opposite behavior at key points in the process.

Unlike the older conceptions of capture that depend fundamentally on the vulnerability of the hearts, minds, and stamina of agency staff to special interests, information capture flourishes even when agency officials are determined to resist this pressure.¹⁶ Even more insidious, under the right circumstances capture will take place even if the dominant participants are not trying to manipulate the system. It is as if the logic of the administrative process creates a gravitational field that attracts more and more information. Even if the consequences are unintended, the parties with the resources to feed the information monster will benefit, to the detriment of actors with fewer resources and the administrative system as a whole. Moreover, once excessive information begins to gum up the works, simple fixes are no longer possible. Radical institutional overhaul becomes the only viable remedy.¹⁷

Information capture thrives in regulatory arenas in which technical issues dominate the rulemaking. In these settings, diffuse beneficiaries, typically represented by public interest groups, face substantial impediments to participating in costly rulemakings when the rules are detailed, complex, technical, and involve issues that are difficult to translate into salient risks for donors, the public, and the media. Without pressure from a diverse group of affected interests and absent a central arbiter with incentives to find balance in spite of incomplete representation, regulatory outcomes risk becoming skewed in favor of the dominant interest group.

A number of important social policies may be adversely affected by administrative law's naïve presupposition that more information is better.¹⁸ Although this affinity for unbounded information may have

16. See *infra* note 49 and accompanying text.

17. See *infra* Part IV.

18. For example, there have been rumblings of information capture and excessive information in the Federal Communications Commission's (FCC's) telecommunications regulations, see Pete Tridish & Danielle Redden, *Radio Controlled: A Media Activist's Guide to the FCC!*, PROMETHEUS RADIO PROJECT, Feb. 12, 2006, http://prometheusradio.org/low_power_radio/organizational_guides/radio_controlled.html (trying to break open the "obscure" FCC rulemakings, which appear to have been mired in information capture, for radio activists); in the disclosure required by securities regulation, see, e.g., Troy A. Paredes, *Blinded by the Light: Information Overload and Its Consequences for Securities Regulation*, 81 WASH. U. L.Q. 417, 449 (2003) (arguing that security disclosure requirements are not sensitive to the need to

originated in the middle of the last century when information was more scarce,¹⁹ in the electronic age, this indiscriminating approach to information is clearly outdated. Indeed, other institutions recognize that effective processing of information is a prerequisite to effective decisionmaking.²⁰ This Article begins by examining pollution and toxics regulations by the Environmental Protection Agency (EPA), but it is part of a larger project that examines a broad range of issue areas that may be adversely affected by the administrative state's obliviousness to the effects of excessive information in a variety of regulatory settings.

The argument that administrative law's utter inability to recognize and address information excess—its filter failure—significantly undermines its ability to ensure administrative accountability in certain areas of regulation unfolds in four Parts. The first Part provides an orientation to the basic concepts of information capture and filter failure and sets them against the larger literature of law, political science, and information theory. The second Part discusses how current administrative laws and processes exacerbate, rather than counteract, excessive information costs and information capture. The third Part highlights some of the adverse consequences that flow from a legal system that remains indifferent to information excess.

Despite the apparent entrenchment of information capture within existing administrative process, this Article closes on an optimistic note by identifying a number of relatively straightforward reforms in the fourth Part that are likely to go some distance toward redressing the adverse consequences of information capture in the administrative state. One antidote presented in this final Part is to reform the standard for judicial review in a way that recalibrates judicial deference to the level of vigorous and balanced engagement by interest groups, rather than to the reasonableness of the agency's result. A variety of panels—like citizen advisory and science advisory

filter or limit information and that this leads to a series of regulatory-related problems); and in utilities regulation, *see* Frank N. Laird, *Learning Contested Lessons: Participation Equity and Electric Utility Regulation*, 25 REV. POL'Y RES. 429, 434 (2008) (discussing how public utilities commission public hearings are still stacked in favor of utilities in ways that resonate with the information capture theory).

19. *See, e.g.*, HERBERT A. SIMON, ADMINISTRATIVE BEHAVIOR: A STUDY OF DECISION-MAKING PROCESSES IN ADMINISTRATIVE ORGANIZATIONS 242 (4th ed. 1997) (criticizing organizations' information systems as generally not being designed "to conserve the critical scarce resource—the attention of managers").

20. *See infra* notes 24–27 and accompanying text.

panels—could also be deployed to counteract information capture’s tendency to focus an agency too narrowly on the concerns of one set of interests. Administrative process should also be revamped to provide agencies with greater freedom to develop rules free from interest group influence, such as providing an early, litigation-free opportunity for regulatory innovation by policy wonks who are insulated from stakeholder pressure. Finally, the dominant stakeholders can be pitted against one another in a competitive sense to cut through the information excess and identify regulatory solutions that otherwise might lie buried beneath piles of information.

I. THE BASICS OF INFORMATION CAPTURE AND FILTER FAILURE

In administrative law, the absence of limits on the quality, quantity, or content of information submitted to the agency makes the temptation to inundate the agency with reams of technical details and multiple arguments all but irresistible. Indeed, a variety of doctrinal and statutory incentives unwittingly encourage regulatory participants to load the administrative system with more and more information in ways that ultimately undermine pluralistic oversight by creating unfair advantages for those advocates who have the resources to engage in these excessive processes. At the root of the problem is filter failure—a refusal of administrative law to make an effort to optimize the amount or nature of information entering or leaving the system. The needed filters or screens would not blot out communications, but rather would make them more efficient and streamlined by requiring regulatory participants, including the agency, to rigorously process communications before inflicting them on other regulatory participants. The absence of filters to encourage more efficient communications, when combined with strong incentives for parties to overload the system, puts the regulatory system at risk of information capture, which allows some parties to control or at least dominate regulatory outcomes using information.

This Part sets out the mechanics of this filter failure and resulting information capture. After providing a more complete explanation of these phenomena, the Part discusses how information capture fits into the theoretical literature more generally. The Part closes by exploring some features of EPA rulemakings that cause them to be particularly vulnerable to information capture.

A. *The Basics of Information Capture*

Information capture involves either the inadvertent or the strategic use of costly communications—well beyond what is necessary to convey the message—to gain control over regulatory outcomes. Information capture can be undertaken by stakeholders or even the agency itself. Because the prize is control over the regulatory outcome, information capture can be waged by different parties (that is, a stakeholder and the agency) simultaneously, often using multiple strategies. To be a serious player in this game, a participant must enjoy convenient access to relevant information, a significant reserve of resources (mostly technical and legal), and high stakes and motivation. To win, a player need not convince his opponents of the merits of his case; he need only wear them down enough to cause them to throw in their towels and give in.

The root cause of information capture is filter failure, a basic failure of the administrative process to force participants to ensure that the information they provide meets the needs of the audience and situation.²¹ Ideally, participants will provide the right level of information—both in content and volume—for their intended audience. In many social settings, in fact, the problem of information excess is not a serious one.²² Most speakers and writers voluntarily bear the costs of processing and filtering information before they communicate it to ensure it will reach their intended audience.²³ In an academic setting, simple rewards like book sales, article citations, and

21. Clay Shirky coined the term “filter failure” in his speech at the Web 2.0 Expo NY, “It’s Not Information Overload. It’s Filter Failure” in September of 2008, which is available at <http://web2expo.blip.tv/file/1277460/>. The need for filters or limits on information that are mindful of the capabilities and limitations of the audience is relatively well accepted, *see, e.g.*, PAUL GRICE, *Logic and Conversation*, in *STUDIES IN THE WAYS OF WORDS* 22, 26 (1989) (offering as a cooperative principle that conversation be based on the needs and purposes of the situation), though the concept may not be totally worked out, even in linguistics, *see, e.g.*, Henry E. Smith, *The Language of Property: Form, Context, and Audience*, 55 *STAN. L. REV.* 1105, 1133 (2003) (observing how linguistics have focused traditionally on the costs of information from the perspective of the speaker, rather than the audience). Shirky’s most valuable contribution is to focus attention on these filters and away from more abstract worries about information overload, which often do not consider the unique features of the receiving institutional or social setting.

22. In Professor Smith’s model of information, “the aim is to maximize the net benefits of communication, that is the excess of the benefits of communication over the costs of production and process. ‘Processing costs’ . . . include the costs incurred by a cognitive agent in receiving information from a message.” Smith, *supra* note 21, at 1108.

23. *See id.* at 1136 (noting how most information theory assumes that the communications are cooperative in nature).

instructor evaluations encourage speakers to internalize the costs of processing information, even when their audience is large and anonymous.

Many areas of law are sensitive to the problem of information excess and even consciously require actors to filter information before the legal system will recognize it. Professor Henry Smith writes with great admiration about property rules that tend to encourage the approximate optimization of information through simple rules that other owners can respect.²⁴ Contract rules may be even more exemplary in calibrating the level of detail and volume that is reasonable for a given contract to the capabilities of the parties.²⁵ Many court battles, at least at the appellate level, involve explicit limits on the pages, margins, and even font size of briefs; the time allocated for oral argument; and the number of pages of attachments.²⁶ And trials before juries—however indirectly—require counsel to distill and abbreviate the key message for a group of lay persons with average attention spans and educational levels. Trial courts also impose a number of important filters on evidence to ensure that counsel, rather than the judicial system, bear the cost of processing this information prior to introducing the evidence at trial.²⁷

But administrative law is different. A commitment to open government and full participation is understood to preclude limits or filters on information, and the administrative system operates on the working assumption that all information is welcome and will be fairly

24. *See id.* at 1114, 1155–56 (arguing that property law does a relatively good job of minimizing third-party processing costs).

25. *See id.* at 1177–90 (discussing the ways that contract law develops to take into account information costs).

26. Virtually every article providing tips for appellate brief writing emphasizes the need for being as succinct as possible and for sharpening arguments to make them accessible to the busy judicial panel. *See, e.g.*, Shari M. Oberg & Daniel C. Brubaker, *Supreme Review*, 87 MICH. B.J. 30, 33 (2008) (“Given the workload of the Supreme Court, effective applications are as concise as possible.”); Michael J. Traft, *Special Considerations in Appellate Briefs*, in 1 APPELLATE PRACTICE IN MASSACHUSETTS ch. 14, § 14.1 (2008).

27. *See, e.g.*, FED. R. EVID. 403 (“Although relevant, evidence may be excluded if its probative value is substantially outweighed by the danger of unfair prejudice, confusion of the issues, or misleading the jury, or by considerations of undue delay, waste of time, or needless presentation of cumulative evidence.”); *see also* Dale A. Nance, *The Best Evidence Principle*, 73 IOWA L. REV. 227, 229 (1988) (noting the argument in recent historical scholarship that “the modern rules of evidence were instituted primarily for the control of lawyers rather than for the control of juries”).

considered.²⁸ Indeed, the historic myth of agencies as experts may have locked the courts into a kind of unrealistic expectation with regard to the unlimited capacity of agencies to resolve any question put to them.²⁹ In their high hopes for the administrative state, the courts and even Congress and the president seem to have designed the system with “the fallacy of thinking that ‘more information is better.’”³⁰

Yet without filters, parties have little reason to economize on the information they submit to agencies.³¹ Participants are not held to any limits on the information they file, nor must they assume any of the costs the agency incurs in processing their voluminous filings.³² Indeed, a variety of court rulings actually encourage regulatory participants to err on the side of providing far too much information, rather than too little.³³ But as information costs rise, so do the costs of

28. See, e.g., Sheila Jasanoff, *Transparency in Public Science: Purposes, Reasons, Limits*, 69 LAW & CONTEMP. PROBS. 21, 21–22 (2006) (discussing the commitment to and gradual expansion of the public’s right to access information underlying agency decisions); see also *infra* Part II.A.

29. See, e.g., Reuel E. Schiller, *The Era of Deference: Courts, Expertise, and the Emergence of New Deal Administrative Law*, 106 MICH. L. REV. 399, 417 (2007) (describing how in the early to mid-1900s, agency experts were viewed as neutral specialists able to successfully implement Congress’s more general policy solutions and identify the “objectively correct solution[s] to the country’s problems”).

30. SIMON, *supra* note 19, at 242–43 (emphasis added).

31. Participants might be naturally inclined to filter communications occurring in individual meetings, hearings, or phone calls with an agency staff member. See, e.g., Andrea Bear Field & Kathy E.B. Robb, *EPA Rulemakings: Views from Inside and Outside*, 5 NAT. RESOURCES & ENV’T, Summer 1990, at 5, 5 (advocating this type of control over short-term communications). Over the long term and across the life cycle of a rule’s development, however, the incentives tend in just the opposite direction.

32. The Freedom of Information Act is an exception to this general rule; it allows the agency to ask the requester to reimburse it for reasonable expenses incurred in responding to the information request. See 5 U.S.C. § 552(a)(4)(A) (2006) (authorizing federal agencies to set fees for search and duplication that are “limited to reasonable standard charges for document search and duplication” and providing for recovery of only the direct costs of such search and duplication).

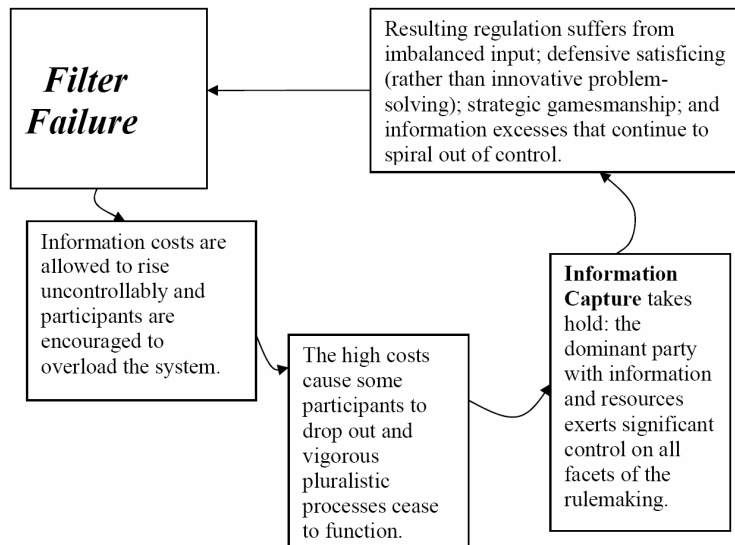
33. For a discussion of these legal incentives, see *infra* Part II.A–B. In theory, the point at which information costs are higher than necessary depends on the intended audience. See, e.g., Smith, *supra* note 21, at 1157 (taking care to avoid the goal of “optimizing” information and instead attempting to highlight how the law sometimes is attentive to trading off the costs of communication shouldered by the communicator and those imposed on the audience). Determining this precise point will be both difficult and quite contestable. Conveniently, however, because the focus of this Article is on filter failure and the nearly complete absence of any restrictions on the flow of information through the system, the argument is simply that some types of filters or restrictions are required. Other commentators may wish to debate how to determine the right level of or approach to filtering in different administrative settings. Although I dodge this bullet, I strongly suspect that ultimately the resolution will come from

participation, and this can affect the ability of some groups to continue to participate in the process and ultimately may cause thinly financed groups to exit for lack of resources.

In a participatory system already struggling against the odds to generate balanced engagement from a broad range of affected parties, filter failure is likely to be the last straw. Pluralistic processes integral to administrative governance threaten to break down and cease to function when an entire, critical sector of affected interests drops out due to the escalating costs of participation. Instead of presiding over vigorous conflicts between interest groups that draw out the most important issues and test the reliability of key facts, the agency may stand alone, bracing itself against a continuous barrage of information from an unopposed, highly engaged interest group. The agency will do its best to stay abreast of the information, but without pluralistic engagement by the opposition, which helps filter the issues, and without the support of procedural filters that impose some discipline on the filings of dominant participants, the agency may find itself fighting a losing battle. A system that puts the decisionmaker at the mercy of an unlimited flood of information from an unopposed group, which in turn can reinforce its filings by a credible threat of litigation, is captured by information. Figure 1 illustrates the dynamics of filter failure and information capture.

pragmatic experimentation with various types of information filters and incentives, until a relatively acceptable balance has been struck.

Figure 1. A Flowchart of Filter Failure and Information Capture



From the standpoint of a resourceful party, the ability to gain control of the rulemaking process through the use of excessive information may even be turned into a strategic advantage.³⁴ Using technical terms and frames of reference that require a high level of background information and technical expertise, and relying heavily on “particularized knowledge and specialized conventions,”³⁵ these fully engaged stakeholders can deliberately hijack the proceedings. Aggressively gaming the system to raise the costs of participation ever higher will, in many cases, ensure the exclusion of public interest groups that lack the resources to continue to participate in the process. Doing so all but assures that the aggressor will enjoy an unrestricted playing field and the ability to control the public input through all phases of the rulemaking life cycle.

Even when agency staff can withstand the technical minutia coming at them at high speed and under tight time constraints, they face an administrative record that is badly lopsided, and threats of

34. For a more detailed description, see *infra* Part III.B.2.

35. See, e.g., Smith, *supra* note 21, at 1167 (describing all of these features as negative aspects of information).

lawsuits against the substance of their regulation that come predominantly from only one sector (industry).³⁶ This skewed pressure may not cause them to cave in to each and every unopposed comment and technical addendum, but it likely affects at least some of the choices incorporated into the final rule.³⁷ And when time is short, information capture becomes even more severe. Agency staff, even those who began their careers as true believers in their agency's mission, may find themselves relieved to have regulations written by industry because this ensures a quicker path toward a final, binding rule.³⁸

B. *Information Capture's Fit with Existing Theories*

Collective action theory already highlights the grim plight of public interest groups saddled with multiple handicaps in organizing and participating.³⁹ The resultant underrepresentation of the diffuse public—at least relative to its actual stake in the issue—is a constant worry for political processes.⁴⁰

Information capture, however, adds a new worry to the collective action story: it reveals that the costs of organizing are not the only impediment that public interest representatives need to overcome.⁴¹

36. See *infra* notes 266–69 and accompanying text.

37. See, e.g., Wendy E. Wagner, Katherine Barnes & Lisa Peters, *Air Toxics in the Boardroom: An Empirical Study of EPA's Hazardous Air Pollutants Rules 19–22* (Nov. 13, 2009) (unpublished manuscript, on file with the *Duke Law Journal*).

38. See *infra* Part III.A.2.

39. See generally STEVEN P. CROLEY, *REGULATION AND PUBLIC INTERESTS: THE POSSIBILITY OF GOOD REGULATORY GOVERNMENT* 29–52 (2008) (providing a thorough overview of public choice concerns about collective action barriers).

40. See, e.g., RONALD J. HREBENAR, *INTEREST GROUP POLITICS IN AMERICA* 329–30 (3d ed. 1997) (discussing the impediments faced by representatives of the diffuse public in relation to more concentrated interests, as well as their struggles to keep up in recent times); NEIL K. KOMESAR, *IMPERFECT ALTERNATIVES: CHOOSING INSTITUTIONS IN LAW, ECONOMICS, AND PUBLIC POLICY* 69–72 (1994) (describing collective action problems with particular reference to how they impede smooth functioning of the political process); Nicholas Bagley & Richard L. Revesz, *Centralized Oversight of the Regulatory State*, 106 COLUM. L. REV. 1260, 1285–90 (2006) (same); see also Colin S. Diver, *The Optimal Precision of Administrative Rules*, 93 YALE L.J. 65, 99 (1983) (“[W]idely dispersed costs or benefits are less effectively represented in policymaking than concentrated costs or benefits. Thus we would expect error-correction to favor interests championed by enforcers and regulated firms and to undervalue interests of unorganized beneficiaries of government programs.” (footnote omitted)).

41. Much of the commentary on public engagement in administrative rulemaking focuses primarily on the costs to nonprofits of organizing, and neglects the equally important costs associated with accessing and processing the relevant information, which can vary significantly between rules. See, e.g., Cary Coglianese, *Citizen Participation in Rulemaking: Past, Present, and*

Instead, inflated information costs, beyond what is justified or necessary, further drive up the cost of participation and simultaneously lower the payoff, at least to public interest groups that will find it increasingly difficult to translate the issues into tangible public benefits.⁴² In economic terms, as the costs go up and the payoff goes down, these thinly financed and salience-dependent groups that represent the public will drop out of the process.⁴³ Indeed, they may even drop out midway through the rulemaking after realizing that they can no longer justify their involvement to donors and other funders.

These rising information costs can take a variety of forms in the regulatory system.⁴⁴ Communications bulging with undigested facts are the most common type of information excess and include redundancies and peripheral issues that must be culled out; discussions pitched at too specialized a level or demanding an unreasonable level of background information from the reader; and discussions delving into very intricate details, many of which are of trivial significance. All of these information excesses serve to inflate

Future, 55 DUKE L.J. 943, 966 (2006) (surmising that the lack of public participation in e-rulemaking is due in large part to the “opportunity costs,” including more recreational opportunities and the concern that one comment will not make a difference in any event; but missing the arguably more important impediment posed by highly voluminous and technical information that must be processed before a party can determine whether it has a stake in the issue or can identify meaningful ways to engage); Stewart, *supra* note 6, at 1760–90 (focusing on stakes-related features that tend to disadvantage public interest groups, but neglecting to consider the added barriers arising from the high costs of processing relevant information that further disadvantage these groups).

42. See, e.g., Constance A. Nathanson, *Social Movements as Catalysts for Policy Change: The Case of Smoking and Guns*, 24 J. HEALTH POL., POL’Y & L. 421, 442 (1999) (discussing the importance of a “credible risk” to environmental and public health campaigns; without this risk, the effort is severely handicapped). Information externalities, then, may be particularly costly for public interest representatives because it not only increases the costs of their participation but also decreases their ability to sell their involvement to donors, thus further shrinking the payoff.

43. Professor Neil Komesar observes that an individual’s participation is based upon the relative costs and benefits of that participation, a calculation that varies not only by issue but by institution. When the costs of information are lowered and information becomes more accessible, participation increases. Similarly, when the benefits to participation rise—for example, through damage awards in tort claims—claimants’ participation increases. See KOMESAR, *supra* note 40, at 8. It is the combination of lower costs and higher benefits that explains the comparative advantages of the tort system relative to the regulatory system in providing improved access to needed information regarding health and environmental protection.

44. See Smith, *supra* note 21, at 1153–55 (roughly defining information externalities as those costs that “are most likely not to be internalized by a sender of a message,” which Professor Smith then illustrates graphically).

the participants' costs in processing the information.⁴⁵ Secrecy and deception also impose unjustified information costs on other participants if they are not able to access the information cheaply or at all.⁴⁶ Even thinly supported litigation threats and marginally meritorious lawsuits can increase information-related costs for recipients (that is, defendants) to unreasonable levels.⁴⁷ Familiar concepts like nuisance litigation and extortive settlements refer at base to the concept that the audience—or defendant—incurs excessive information costs as a result of plaintiffs' abuse of process.⁴⁸

The results of this information capture resemble the outcomes expected from more traditional forms of capture, but the mechanisms through which information capture occurs are actually quite different from and at odds with these early public choice models. Most versions of old-fashioned agency capture depend on wooing malleable agency staff and officials with contributions or promises of future employment.⁴⁹ If the soul of the regulatory official is not for sale, then

45. For examples, see *infra* notes 92, 94–112 and accompanying text. Information costs include costs associated with accessing and processing information. Information processing costs can arise from information that requires specialized training or extensive background expertise, information that is voluminous, information that is dense and complex, and information that is poorly organized and not explained in clear ways. Access costs arise primarily when one or more of the participants has asymmetric information and, at its extreme, involves a party's refusal to share the information. The importance of these different types of information costs to rational behavior is still being worked out, but their basic features—of raising the costs for audiences to understand a message—seems well accepted. For some of the ongoing work that attempts to better understand how these species of information costs affect behavior, see, for example, Haruo Horaguchi, *The Role of Information Processing Cost as the Foundation of Bounded Rationality in Game Theory*, 51 *ECON. LETTERS* 287 (1996); Stephen Morris & Hyun Song Shin, *Optimal Communication*, 5 *J. EUR. ECON. ASS'N* 594 (2007).

46. See *supra* note 45.

47. See, e.g., Cary Coglianese, *Challenging the Rules: Litigation and Bargaining in the Administrative Process* 104 n.25 (1994) (unpublished Ph.D. dissertation, University of Michigan) (on file with the *Duke Law Journal*) (recounting an anecdote in which the industry petitioned in the hope of getting rule adjustments, but the agency held firm and the industry ultimately voluntarily dismissed its petition).

48. See, e.g., *In re Diet Drugs Prods. Liab. Litig.*, 236 F. Supp. 2d 445, 453–60 (E.D. Pa. 2002) (criticizing attorneys for medically unreasonable assembly-line diagnoses in the fen-phen settlement); see also Lester Brickman, *On the Theory Class's Theories of Asbestos Litigation: The Disconnect Between Scholarship and Reality*, 31 *PEPP. L. REV.* 33, 62–103 (2003) (hypothesizing a high false-positive rate of asbestosis diagnoses in mass asbestos litigation due to plaintiffs' attorneys' assembly-line practices).

49. See, e.g., Bagley & Revesz, *supra* note 40, at 1284 (observing how capture theory is based on the premise that well-organized groups gain an advantage by contributing votes and resources); Michael E. Levine & Jennifer L. Forrence, *Regulatory Capture, Public Interest, and the Public Agenda: Toward a Synthesis*, 6 *J.L. ECON. & ORG.* 167, 178 (1990) (“‘Capture’ is the adoption by the regulator for self-regarding (private) reasons, such as enhancing electoral

this traditional form of agency capture is ineffectual. Information capture, by contrast, thrives even in cases in which officials are principally opposed to the skewed outcomes that may result. The end result, however, is the same. In information capture, just as in old-fashioned capture, the stakeholders with relatively greater resources are able to dominate the outcomes and often do so free of oversight by onlookers—not because the deals have been struck through financial inducements, but because they are so technical and complicated that in practice they take place at an altitude that is out of the range of vision of the full set of normally engaged and affected parties.

Information capture also fits neatly within existing political science models of interest group participation, though again the phenomenon seems to be missing from existing theory. In his classic four-quadrant typology of regulation, for example, Professor James Q. Wilson predicts that when the benefits of a policy are diffused across the population and the costs are concentrated on a small group of regulated parties, the agency is more at risk of capture unless a charismatic entrepreneur emerges who acts as the “vicarious representative” of the public beneficiaries.⁵⁰ On its face, Professor Wilson’s model fits well with information capture, which simply adds in the variable of information costs to predict particularly high risks of capture for complex and technical rules. In applying his model to the subset of technical environmental regulations, however, Professor Wilson is surprisingly optimistic that dominance by regulated parties will generally be avoided due to the low costs of accessing the process and the growing prevalence of policy entrepreneurs, such as environmental nonprofits.⁵¹ Through these assumptions, Professor Wilson betrays a possible blind spot with regard to filter failure and

support or postregulatory compensation, of a policy which would not be ratified by an informed polity free of organization costs.”).

50. See JAMES Q. WILSON, *THE POLITICS OF REGULATION* 367–70 (1980). Professor Wilson’s four quadrants of politics categorize regulation according to the distribution of benefits (concentrated or diffuse) on the one hand, and the distribution of costs (concentrated or diffuse) on the other. The specific categories include not only “entrepreneurial politics,” in which benefits are broad but the costs of a policy are concentrated, but also “majoritarian politics,” in which society in general incurs both the benefits and the cost of the policy; “interest-group politics,” in which both the costs and benefits of a policy are concentrated on a narrow set of interests; and “client politics,” in which the benefits of a policy accrue to a narrow set of interests and the costs are spread over the entire population. *Id.*

51. See, e.g., *id.* at 385 (suggesting that environmental groups can hold industry accountable and participate equally in regulation).

resulting information capture. Professor William Gormley's quadrants of regulatory participation come much closer to recognizing the existence of information capture because he qualifies as subject to one-sided interest-group dominance (what he calls "board room politics") those rules for which the information is highly complex.⁵² But these must also be nonsalient rules, by which he means rules that do not interest the public,⁵³ and which he assumes, like Professor Wilson, generally do not include health or environmental rules.⁵⁴ Professor Gormley's neglect of filter failure and corresponding information excesses also seem to cause him to miss potentially important interactions between his own two variables, complexity and salience.⁵⁵

More specific references to an information capture-like phenomenon did arise during the early period of social regulation, but these accounts mysteriously seemed to fizzle out before they developed into more robust explanatory models.⁵⁶ James Landis, for example, observed in 1960 that regulated industry—in large part through the never-ending stream of information—has a "daily machine-gun like impact" on the agency that leads to an industry

52. See William T. Gormley, Jr., *Regulatory Issue Networks in a Federal System*, 18 *POLITY* 595, 607–08 (1986).

53. See *id.* at 598 ("A highly salient issue is one that affects a large number of people in a significant way. Expressed a bit differently, salience is low unless the scope of conflict is broad and the intensity of conflict is high.").

54. See *id.* at 600 tbl.1 (including among the high-complexity, low-salience rules: "Cable Television Regulation," "Antitrust Regulation," "Securities Regulation," "Insurance Regulation," "Banking Regulation," "Telephone Regulation," "Transportation Regulation," "Hospital Regulation," and "Patent Regulation"; and including in the high-complexity, high-salience rules: "Hazardous Waste Regulation," "Air Quality Regulation," "Water Quality Regulation," "Occupational Safety," and "Health Regulation").

55. The strategic ability to move rules that have the capability of being "salient" into the "nonsalient" pile through information capture seems to escape Professor Gormley's model. In retrospect, Professor Gormley's classification system easily could be amended to include practical inaccessibility to the public as part of the salience variable. This friendly amendment acknowledges the multiple reasons why interest groups (particularly public interest groups) may or may not engage in a rule, and also notices how complexity makes engagement increasingly unlikely for public interest groups, thus creating a feedback effect between the variables.

56. The possibility of information capture seemed to be largely dismissed by the late 1970s, based in part on a renewed faith in pluralistic processes made possible by the courts' expanded scope of preenforcement judicial review. Professor Croley, for example, argues that agencies typically account for information biases introduced by regulated parties, in part because adversaries will be quick to counteract this type of informational pressure. See, e.g., CROLEY, *supra* note 39, at 294 ("If one group supplies an agency with incomplete or biased information, another group with adverse interests will have opportunities to challenge or rebut it."); see also *infra* Part III.A.

bias.⁵⁷ And Professor Louis Jaffe suggested as early as 1954 that by virtue of their continuing presence, regulated parties capture agencies through the constant stream of information they provide to agencies.⁵⁸ Later, in 1978, Professors Owen and Braeutigam noticed how stakeholders could use information games—filing voluminous and technical comments, for example—to gain control over the agency.⁵⁹

In any case, these prescient sightings of information overload still miss the important intersection between information theory and administrative law that information capture helps bring into focus. The problem is not *just* that interested parties can strategically bombard the agency with information in order to overwhelm them. It is that the administrative system is so completely oblivious to information costs that it not only neglects requiring some information filtering, but also collectively creates strong incentives for this information excess. Although much of the resulting information overload may result from inadvertence—a blind but rational response to rules of administrative process—the system’s obliviousness to information costs also creates space for strategic gamesmanship. Information excess can then be a conscious strategy deployed by resourceful participants to exhaust their adversaries, reduce the accountability of the rulemakings outside of the immediate circle of those in the know, and browbeat the agency into capitulating to many of their demands by reinforcing each technical complaint and criticism with a credible threat of litigation.

Information capture and the accompanying notion of filter failure not only highlight the perverse role that information can play in administrative law, but also fill some gaps in existing theories of interest group participation and agency accountability. For example,

57. LANDIS, *supra* note 12, at 71. *But see* CROLEY, *supra* note 39, at 293–95 (recounting the theory of information capture, but concluding that support for the hypothesis is limited to nonexistent).

58. *See, e.g.*, Louis L. Jaffe, *The Effective Limits of the Administrative Process: A Reevaluation*, 67 HARV. L. REV. 1105, 1113–19 (1954); Louis L. Jaffe, *Federal Regulatory Agencies in Perspective: Administrative Limitations in a Political Setting*, 11 BOSTON C. INDUS. & COM. L. REV. 565, 566 (1970); *see also* 2 ALFRED E. KAHN, *THE ECONOMICS OF REGULATION* 11–14 (1971); Roger Noll, *The Economics and Politics of Regulation*, 57 VA. L. REV. 1016, 1028–30 (1971) (observing that “most of the information flowing to the agency will come from the regulated”).

59. *See* BRUCE M. OWEN & RONALD BRAEUTIGAM, *THE REGULATION GAME: STRATEGIC USE OF THE ADMINISTRATIVE PROCESS* 4–5 (1978) (advocating that special interests should make strategic use of information and litigation to gain control over the administrative process).

information capture embellishes in important ways on familiar concepts such as agency costs, monitoring costs, and slack—terms that generally refer to the costs or capacity for stakeholder oversight of agency decisions.⁶⁰ When information capture is taken into account, it becomes important not only to think of whether the average agency monitoring costs are high or low, but also to assess the difference in monitoring costs between the most and least informationally advantaged participants in the rulemaking process (assuming that their stakes are roughly equivalent).⁶¹ References to monitoring costs or slack that aggregate all interest groups as an undistinguished unit may miss a critical variable in the accountability equation.

Information capture, in contrast to older versions of capture, is also more apolitical and value neutral than the iron triangles of political theory that seem to depend on the prospect of campaign contributions and similar financial inducements between regulated parties and congresspersons (two points of the triangle) and on the predisposition of agency personnel to capitulate to congressional pressure (the third point of the triangle).⁶² A sharp disparity in resources is one factor in predicting the onset of information capture in administrative law, but it is not decisive. Poorly financed groups can succeed in information capture if the issue is salient and the stakes are high enough for them.⁶³ Additionally, in situations in which a group holds information advantages, it can engage more inexpensively than other groups, even when it lacks other types of resources.

Information capture could even catalyze rethinking of the basic model for agency accountability.⁶⁴ Information capture and filter

60. See, e.g., Levine & Forrence, *supra* note 49, at 180 (discussing these terms and explaining that the term “slack” refers to the discretion a regulatory agency enjoys that is free from accountability).

61. An agency official may have extraordinary slack from the vantage point of an attentive but informationally exhausted public interest group that cannot keep up with the information, but very little slack with regard to the careful, information-intensive positions, arguments, and documentation that a common set of regulated parties produce over the life cycle of regulation. Cf. Levine & Forrence, *supra* note 49, at 185, 187, 190 (discussing the average amount of slack for a given rule or policy and noting that it is often very high when information costs are high, but not discussing how different interest groups may provide a regulator with very different amounts of slack in a single rulemaking).

62. See, e.g., HREBENAR, *supra* note 40, at 263 (describing Iron Triangles formed in part by contributions to officials that create cozy relationships).

63. Cf. *id.* at 331–39 (focusing on the important role that resources play in political power).

64. For a more detailed discussion of these adverse consequences, see *infra* Part III.

failure underscore how requiring agencies to open their rules to comments, without limits or penalties, runs the risk of inviting kitchen sink, scattershot comments that can occupy shelves of docket space and exhaust attentive participants. Information capture highlights how enlarging access to the courts can inadvertently provide a strategic tool for advantaged stakeholders to extort the agency and threaten it into submission. And even the dedication to transparency contributes to information capture because it flags for onlookers just how complex the rule is without providing any incentive or mechanism for them to engage in participating. At the same time, for engaged and resourceful onlookers, a transparent rulemaking provides more opportunity to trawl the record for weak assumptions and concessions of uncertainty, and ultimately to increase the issues in dispute.

Finally, information capture may begin to bridge legal analysis to other areas of study, like information theory.⁶⁵ Information theory has been a robust discipline for more than half a century; indeed, when administrative law is viewed from the perspective of information theorists, its design appears curiously primitive. Nobel Prize-winning thinkers like Herbert Simon have long stressed that the “major problem” with organizations is their failure to realize that attention, not information, is the limiting ingredient.⁶⁶ These limitations are most pressing when an organization faces time constraints in decisionmaking.⁶⁷ The desperate need for information-management systems in large organizations, like regulatory agencies, is an inescapable conclusion of this pioneering body of work. An entire discipline—the mathematical theory of information—is dedicated to studying ways to streamline communications and limit information externalities.⁶⁸ Within this theory, one of the central criteria for good

65. See, e.g., Smith, *supra* note 21, at 1125 (“Because the stakes can be quite high in the law, the costs involved in the informational tradeoff sometimes require intervention, so that they may be more fully internalized by those sending messages about legal relations.”).

66. See, e.g., SIMON, *supra* note 19, at 241–43. Dr. Simon observes that:

The major problems of organization today are not problems of departmentalization and coordination of operating units. Instead, they are problems of organizing information storage and information processing—not division of labor, but factorization of decision-making. These organizational problems are best attacked, at least to a first approximation, by examining the information system and the system of decisions it supports in abstraction from agency and department structure.

Id. at 248–49.

67. See, e.g., *id.*

68. See, e.g., ROBERT ASH, INFORMATION THEORY (1965); CLAUDE E. SHANNON & WARREN WEAVER, THE MATHEMATICAL THEORY OF COMMUNICATION (1949).

communication is minimizing information costs; for example, keeping bits of information at the lowest level possible, much like Bell's invention of the alphabet for the telegraph, which used the shortest symbols for the most frequently used letters. This work similarly underscores the importance of processes that control information costs as part of basic institutional design. The economic theory of information, which studies inefficiencies and related defects created by various types of information costs, is now a burgeoning field.⁶⁹ Even within law and economics, a number of scholars have developed a robust literature examining how certain types of information costs—most notably those resulting from asymmetrical information—impair the effectiveness of legal rules.⁷⁰ This work also suggests that the law should pay closer attention to the need to filter information, although legal analysts have their work cut out for them in considering how to do so given the rather mature state of administrative law.

At the same time, information capture also highlights blind spots in both legal theory and information theory. Traditionally, information theory has not engaged deeply in the study of deception or abuse of information; instead, the primary focus is on streamlining and making communications still more efficient.⁷¹ The mutual blind spots between these respective fields make the challenge of linking them together more difficult, but hopefully even more worthwhile.

C. *Environmental Rulemakings and Their Susceptibility to Information Capture*

So far, this discussion of information capture has been largely abstract. To make the concept at least a little more concrete, it may be helpful to consider the concept of information capture in the context of a typical EPA rulemaking.

69. See, e.g., JACK HIRSHLEIFER & JOHN G. RILEY, *THE ANALYTICS OF UNCERTAINTY AND INFORMATION* (1992); INÉS MACHO-STADLER & J. DAVID PÉREZ-CASTRILLO, *AN INTRODUCTION TO THE ECONOMICS OF INFORMATION: INCENTIVES AND CONTRACTS* (2d ed. 2001); LOUIS PHILIPS, *THE ECONOMICS OF IMPERFECT INFORMATION* (1988); Joseph E. Stiglitz, *The Contributions of the Economics of Information to Twentieth Century Economics*, 115 Q.J. ECON. 1441 (2000).

70. For a sample of this body of scholarship, see Ian Ayres & Robert Gertner, *Filling Gaps in Incomplete Contracts: An Economic Theory of Default Rules*, 99 YALE L.J. 87, 91 (1989); Smith, *supra* note 21, at 1111.

71. See, e.g., Smith, *supra* note 21, at 1136.

In the vast majority of EPA rulemakings, the agency is tasked by Congress with setting industry- or product-specific rules that limit pollution or restrict the availability of chemicals or pesticides.⁷² In most cases, the agency must also calculate the cost burden on industry and factor it into the rule to ensure that the technologies, methods of inspection, and so on are practically available to all affected industries.⁷³ These types of health-related regulations comprise not only a large portion of the EPA's workload but also a large share of rules promulgated by the Occupational Safety and Health Administration (OSHA) for the workplace,⁷⁴ by the Consumer Product Safety Commission (CPSC) for a variety of consumer products,⁷⁵ and by the Food and Drug Administration (FDA) for some food products, cosmetic products, food additives, and drugs.⁷⁶ Indeed, most public health and environmental protection occurs through these product-, industry-, or site-specific rulemakings that target particular risks and attempt to restrict them to reasonable levels.⁷⁷

72. *See, e.g.*, Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), 7 U.S.C. § 136a (2006) (requiring manufacturers of new pesticides to conduct specific tests on the pesticide and obtain registration from the EPA before marketing it); Toxic Substances Control Act (TSCA), 15 U.S.C. § 2604 (2006) (requiring manufacturers of new chemicals to submit a premanufacture notification); Clean Water Act (CWA), 33 U.S.C. § 1321 (2006) (prohibiting the point source discharge of pollution without a permit that, in turn, is based on the capabilities of the best available technology); Resource Conservation and Recovery Act (RCRA), 42 U.S.C. §§ 6923–25 (2006) (requiring transporters and treatment, storage, and disposal units handling hazardous wastes to self-identify and follow regulatory requirements); Clean Air Act (CAA), 42 U.S.C. § 7412(i) (2006) (prohibiting the emissions of air toxins in major amounts without a permit that specifies emissions limits for the source).

73. For example, in setting technology-based standards under the Clean Water Act, the EPA must consider the cost to industry, but in doing so, it generally considers features such as the age of equipment and facilities involved, the process employed, potential process changes, nonwater quality, environmental impacts including energy requirements, economic achievability, and other such factors as the EPA Administrator deems appropriate. *See, e.g.*, Effluent Limitations Guidelines and New Source Performance Standards for the Concentrated Aquatic Animal Production Point Source Category, 69 Fed. Reg. 51,891, 51,896 (Aug. 23, 2004) (codified at 40 C.F.R. pt. 451); *see also* 33 U.S.C. § 1314(b)(2) (2006).

74. *See, e.g.*, 29 U.S.C. § 655(a)–(b) (2006) (requiring the Secretary of Labor to establish mandatory nationwide standards governing health and safety in the workplace).

75. *See, e.g.*, 15 U.S.C. § 2056 (2006) (allowing the Consumer Product Safety Commission to set consumer safety standards for products).

76. *See, e.g.*, Food, Drug, and Cosmetic Act, 21 U.S.C. § 341 (2006) (requiring the Secretary of Health and Human Services to promulgate nationwide standards for food identity and quality).

77. *See generally* JOHN APPLEGATE, JAN G. LAITOS & CELIA CAMPBELL-MOHN, THE REGULATION OF TOXIC SUBSTANCES AND HAZARDOUS WASTES ch. 6 (2000) (setting out these different standard-setting programs in greater detail).

Even though establishing pollution and product standards tends to dominate the EPA's rulemaking agenda, most of these standards are rarely covered in the news.⁷⁸ The agency rules that do gain the most attention—setting air standards for the country and allowing coal plants to trade mercury emissions—are atypical. These newsworthy rules are almost always national in scope, their health and environmental consequences are obvious and hence salient, and they have a robust mix of affected parties engaged in a fight over them.⁷⁹

But the EPA appears to issue only a few such very visible rules each year. The other three hundred or more bread-and-butter rules that the EPA promulgates annually get far less attention.⁸⁰ And indeed, their relative obscurity is central to understanding why they may be uniquely susceptible to information capture. Although many of these rules have significant implications for public health and environmental protection,⁸¹ the EPA rulemaking process does not

78. See, e.g., Wagner et al., *supra* note 37, at 30–32 (charting the frequency of news reports on hazardous air pollutant regulation from 1990 to 2009).

79. See, e.g., CROLEY, *supra* note 39, at 160 (characterizing each of these rules as being “enormously important to regulatory decisions that sparked intense national debates and implicated billions of dollars. . . [and noting these same rules] would all unquestionably make a short list of some of the most significant regulatory activity in more than a decade”).

80. Professor Coglianese estimated that the EPA promulgated 334 rules per year from 1986 to 1990. See Coglianese, *supra* note 47, at 1 n.2, app.1. In an ongoing empirical project to gauge the “newsworthy” features of at least some of these rules, a Lexis search of major newspapers was conducted for media coverage of the EPA's promulgation of air toxic emissions standards over a twenty-year period. See Wagner et al., *supra* note 37, at 31. The search found that only about 15 percent of ninety emissions standards were referenced in a major newspaper, despite their significance to public health protection. *Id.* Readers can gauge the newsworthy quality of EPA rules for themselves by running random searches for examples of typical EPA rulemakings in the Office of Management and Budget's new Unified Agenda database. See RegInfo.gov, Advanced Search – Select Publication(s), <http://www.reginfo.gov/public/do/eAgendaAdvancedSearch> (last visited Feb. 15, 2010). This spontaneous, limited sampling should provide further support for the general assertion that most EPA rulemakings remain obscure and out of public view.

81. In the Clean Air Act, for example, Congress directs the EPA to reduce the incidence of cancer attributable to the emission of air toxins from select sources in urban areas by at least 75 percent. See Clean Air Act, 42 U.S.C. § 7412(k)(1) (2006). Indeed, almost all pollution control standards under the statutes cited at note 72, *supra*, impose some restrictions on industrial operations that were initially unregulated with regard to pollution. A much more difficult question arises with respect to what the public health consequences are for the range of plausible alternative standards for each of these pollution control rules. In other words, how many more lives does the most rigorous version of the pollution control standard save as compared to the weakest plausible standard under consideration? Because these standards involve multiple subissues that directly affect the timing and enforceability of the rule as well as its coverage and stringency, there are likely to be potentially significant differences for many of

require that actual public health benefits be calculated or considered.⁸² In fact, because the agency is generally regulating the pollution source, rather than the environment itself, the direct implications for public health and the environment are not considered germane to the rule.⁸³ If an interest group—for or against the rule—is interested in such information, it must model the health implications of different source standards on its own.⁸⁴ This seems rare, but in cases in which it has been done, the public consequences can prove quite significant.⁸⁵

the rules. *See infra* notes 94–111 and accompanying text; *see also* Wendy Wagner & Lynn Blais, *Children's Health and Environmental Exposure Risks: Information Gaps, Scientific Uncertainty, and Regulatory Reform*, 17 DUKE ENVTL. L. & POL'Y F. 249, 256–58 (2007) (describing some of the enforceability and related problems with these rules, which significantly undermine their protective qualities). Indeed, the fact that environmental groups participate in nearly half of these rules, despite the barriers discussed in Part III.A, *infra*, suggests that the EPA's development of these standards do matter, potentially very much, to public health.

82. This type of modeling is done only for “significant” rulemakings as determined by their costs to industry. *See* Exec. Order No. 12,866, 3 C.F.R. 638 (1994), *reprinted as amended in* 5 U.S.C. § 601 (2006). Bread-and-butter rules rise to this level only occasionally, *see, e.g.*, Wagner et al., *supra* note 37, at 18, but even in these cases, public health benefits are often characterized incompletely and almost as an aside. *See, e.g.*, Winston Harrington, Lisa Heinzerling & Richard D. Morgenstern, *What We Learned*, in REFORMING REGULATORY IMPACT ANALYSIS 215, 224 (Winston Harrington, Lisa Heinzerling & Richard D. Morgenstern eds., 2009) (advocating as a reform of regulatory analysis greater attention to the specification of the public health benefits of regulatory alternatives, and basing this proposal on infirmities detailed in preceding chapters).

83. *See, e.g.*, Wendy E. Wagner, *The Triumph of Technology-Based Standards*, 2000 U. ILL. L. REV. 83, 88–89, 96–97 (discussing this feature of technology-based standards when emissions limits are based on the capabilities of existing pollution control technologies rather than on the needs of the receiving environment).

84. *See* Nathanson, *supra* note 42, at 445 (arguing that a “credible risk” is needed to engage the public). In discussing his difficulty in making worker-safety issues salient for the news and foundations, a prominent epidemiologist confided to the Author off the record that, after laying out all of the worrisome risks for a reporter, the reporter asked, “but where are the dying orphans?”

85. *See, e.g.*, Occupational Exposure to Benzene, 52 Fed. Reg. 34,460, 34,461 (Sept. 11, 1987) (codified at 29 C.F.R. pt. 1910) (“OSHA estimates that the new standard [for benzene exposure in the workplace] will prevent a minimum of 326 deaths from leukemia and diseases of the blood and blood-forming organs over a working lifetime of 45 years.”). Interestingly, the public visibility of analogous pollution control standards may be even lower, as discussed in note 80, *supra*. Recently, however, there has been increased interest in the cumulative health risks associated with these standards. *See, e.g.*, Dina Cappiello & Lise Olsen, *In Harm's Way*, HOUSTON CHRON., Jan. 16, 2005, at A1, *available at* http://www.chron.com/CDA/archives/archive.mpl?id=2005_3836663 (reporting on a prize-winning investigative study of inexplicably high concentrations of air toxins in local communities, some of which may be in compliance with existing standards); *see also* Brad Heath & Blake Morrison, *Health Risks Stack Up for Students Near Industrial Plants*, USA TODAY, Dec. 10, 2008, at A2 (documenting uncontrolled hazardous

At the same time that the public benefits of pollutant standards are unspecified, the consequences for industry are clear, immediate, and direct. A worried regulated party can identify countless issues relating to the imposition of a pollution control standard that may affect its operations and ultimate profitability. For example, in a decision about how to set technology-based controls for industry, the following questions might be raised: What are the best technologies available in the market? How good are they, or do they vary according to the plant in which they are installed? Are most industry participants the same, or do they break into subgroups that should be treated differently? How easy are the various technologies to install and operate in most industries? How should the new pollution control technology be monitored and reported? The answers to these questions, and many more like them, determine the rigor of the standards the EPA promulgates.⁸⁶

In a proposed rule, the agency will offer a proposal for addressing these many technical questions. Because the agency's proposal depends on mastering many of the issues of concern to industry, these plans are typically developed with heavy industry involvement years before the proposed rule is actually published and formally shared with the public.⁸⁷ And as might be expected, regulatory energies tend to focus like a laser on the alternative compliance options and their costs for industry, with the possible differences in public benefits completely ignored or quickly drowned out by the hubbub relating to the technical details.⁸⁸ After the

air pollutants in potentially dangerous concentrations near a large number of schools throughout the United States).

86. See D. Bruce La Pierre, *Technology-Forcing and Federal Environmental Protection Statutes*, 62 IOWA L. REV. 771, 810–11 (1977) (specifying three steps in setting technology-based standards: (1) categorizing industries; (2) identifying the contents of their respective wastewaters; and (3) identifying the range of control technologies available); see also Sanford E. Gaines, *Decisionmaking Procedures at the Environmental Protection Agency*, 62 IOWA L. REV. 839, 853 (1977) (discussing questions regarding the effectiveness of pollution control technologies under various plant ages, sizes, and manufacturing conditions).

87. See, e.g., NEIL GUNNINGHAM, PETER GRABOSKY & DARREN SINCLAIR, *SMART REGULATION: DESIGNING ENVIRONMENTAL POLICY* 44 (1998) (noting the “clear imbalance of knowledge between regulators and industry” with regard to setting technology-based standards).

88. There are very powerful, public-benefitting reasons to bracket a consideration of these health and environmental benefits in setting pollution control standards (whether technology-based or simply source- or waste-specific). Because the actual health and environmental benefits are difficult to identify with quantitative precision, requiring an industry to “do its best” given available technologies allows for less litigation (from industry) and, as a result, more expeditious standard setting. See, e.g., Wagner, *supra* note 83, at 83. The discussion here should

resulting proposed rule is published, the agency must solicit comments on the rule from all interested parties.⁸⁹ Based on those comments and any other information presented to it, the agency will revise the rule and publish it in the *Federal Register*.

Both because the issues are so important to stakeholders and because there is no limit on communications, it is not surprising that most EPA rulemakings involve a large amount of documentation, much of which is highly technical. (Although this technical information is quite important to industry, it is largely obscure to the public.) The index of the rulemaking record for a single pollution control standard often runs into the hundreds of pages.⁹⁰ The final rule and supporting preamble published in the *Federal Register* is generally at least several dozen pages and can reach over two hundred pages in length.⁹¹ Virtually every page, moreover, is filled with technical discussions that assume a high level of specialized knowledge.⁹² Yet, in the hundreds of pages of documentation, it is

not be read as an argument that this approach to standard setting in many media is a mistake or needs to be revised. As a matter of process, however, it does seem problematic for public health consequences to be ignored for many and likely most EPA rulemakings, particularly because these consequences highlight the public's stake in the issue and thus generate greater public oversight. This oversight, discussed later, should be redressed by a requirement—perhaps imposed in place of the RIA process—that agencies always characterize the public and environmental benefits of varying control options to provide the public and their representatives a better basis for understanding the implications of the rule and gauging their involvement in its design. *See infra* Part IV.A.3. If this cannot be done quantitatively for some or all benefits, then qualitative estimates and descriptions are sufficient as well as discussions of why the uncertainty remains. As is later suggested, if the analysis here is correct, then the RIA process completely misses the true analytical needs of regulators—these low-salience rules—and concentrates energies on issues (compliance costs) and rules (high salience) in which the rulemaking process is least likely to fail. *See infra* Part III.A.4.c.

89. *See* 5 U.S.C. § 553(c) (2006) (requiring that “the agency shall give interested persons an opportunity to participate in the rule making through submission of written data, views, or arguments”).

90. *See, e.g.*, Wagner et al., *supra* note 37, at 13.

91. *Id.* at 18–19.

92. The detailed, technical features of the rules should not be underestimated. The following excerpt is from the EPA's explanation of how it responded to significant comments on its pollutant standards for the emissions of hazardous air pollutants from acrylic and modacrylic fiber production. This excerpt is not a random selection, but it is a relatively representative sample of the level of specialized knowledge and background information that the EPA demands from its readers:

ii. Can the pollution prevention control techniques being used by several of the plants with suspension spinning operations be used for the solution process in existing facilities? Although the air emission and source characteristics for all other emission point types (i.e., tanks, equipment components, wastewater treatment units) are similar throughout the source category, the solution and suspension processes associated with the spinning operations differ from each other in the processing steps

rare for even one sentence to discuss the implications of the rule for public health or the environment. The final rule, with all of its accompanying documentation, then forms the backdrop or record against which the agency is tested to determine whether its final rule is reasonable, or at least not arbitrary.⁹³

A closer look at a single, bread-and-butter rule illustrates at least a few of the problems that can arise in these unwieldy rulemakings, particularly when the agency is engaged in a time-sensitive project. Consider, as an example, the rule promulgated in the mid-1990s regulating the emissions of toxic air pollutants from chemical storage tanks in tank farms at large petrochemical plants.⁹⁴ In this rule, the emissions standards were unusually straightforward—for most tanks, the EPA required lids with tight seals to keep them from emitting significant quantities of toxic pollutants into the air.⁹⁵ But this emissions standard did not resolve all critical regulatory issues; chief among them was how to make sure that these tanks would not leak hazardous air pollutants if the seal became loose or worn. On this issue, the EPA could have required the industry to install continuous emissions monitors at the rim of the tanks that would trigger an alert if a worrisome level of toxins was detected at the edge or over the

and the acrylonitrile concentrations in the process materials and associated emissions. Solution polymerization spin dope for fiber production contains, by product and process design, a significantly higher concentration of residual AN monomer than does suspension polymerization. The public comments [filed by industry] argued that the application of the pollution prevention techniques being used for suspension processes (e.g., steam stripping of excess monomer, scavenger solvents) to existing solution processes is not viable because of the physical nature of the solution polymerization process. Specifically, application of high efficiency residual AN polymer steam stripping (incorporated to reduce downstream emissions) is technically feasible to incorporate into the suspension process and is not feasible for a solution polymerization process because the latter does not produce a solid polymer product that can be introduced to direct steam contact without contamination. At solution polymerization facilities, other pollution prevention or source reduction measures which formed the initial technical basis for determining the 100 ppmw action level for all spinning lines may not be capable of achieving the higher AN removal rates of the higher residual monomer concentration present in solution polymerization fiber spinning operations. We agree with the public comments that incorporating the pollution prevention techniques to an existing solution process spinning line is not viable.

National Emission Standards for Hazardous Air Pollutants: Generic Maximum Achievable Control Technology (Generic MACT), 64 Fed. Reg. 34,853, 34,862 (June 29, 1999) (codified at 40 C.F.R. pt. 63).

93. *See, e.g.,* Edison Elec. Inst. v. OSHA, 849 F.2d 611, 617–18 (D.C. Cir. 1988) (holding that more than the administrative record can be considered in judicial review).

94. *See* National Emission Standards for Hazardous Air Pollutants for Source Categories, 40 C.F.R. §§ 63.100–183 (2009).

95. *See id.* § 63.119(a) (providing extremely detailed requirements that amount to requiring a seal and floating lid for most tanks).

surface of a tank. Or the EPA could have required regular inspections of the tanks with a sniffer, much like what natural gas companies use to detect gas leaks. Instead, in the final rule, the EPA simply requires visual inspections by a company employee to ensure the seal is intact.⁹⁶ With regard to the frequency of this self-monitoring, the EPA could have required weekly or even monthly examinations given the seemingly low expense of the visual self-inspection; instead, the EPA set the inspection interval at one year.⁹⁷ Indeed, under the rule, if a leak is discovered in the course of this annual check-up, the company is given another forty-five days to correct the problem, as well as the opportunity to self-administer up to two additional, thirty-day extensions.⁹⁸ And to complete the picture, records of the industry's compliance with these self-inspection requirements are stored onsite and are not filed with state agencies or the federal EPA.⁹⁹

How could these strikingly permissive enforcement requirements survive the fierce adversarial pressures of administrative rulemakings? The docket index, documents in the record, and proposed rule itself provide a clue. The proposed rule, which included three other subparts, was over 187 pages long.¹⁰⁰ Just on the storage tank rule alone, the EPA met with industry groups at least three times before publishing the proposed rule, communicated with them through letters, and prepared at least fifteen background documents.¹⁰¹ After publication of the proposed rule, twenty-two industries and industry associations—nearly all of them household names—and a smattering of public interest advocates—more precisely, two public interest groups and four states or state regulatory associations—engaged first in formal notice and comment just on the storage tank portion of the rule and then presented their concerns at a public hearing.¹⁰² The EPA's response to these and other significant comments in the larger, four-part final rule identifies

96. *See id.* § 63.120(a)(1).

97. *See id.* § 63.120(a)(2).

98. *See id.* § 63.120(a)(4).

99. *See id.* § 63.123(c).

100. *See* National Emission Standards for Hazardous Air Pollutants for Source Categories, 57 Fed. Reg. 62,607 (proposed Dec. 31, 1992) (to be codified at 40 C.F.R. pt. 63).

101. *See* Hazardous Organic NESHAP Storage, Docket No. A-90-21, Document Nos. II-A-1 to -6, II-B-1 to -7, II-E-4 (Oct. 29, 1992), *available at* <http://www.regulations.gov/search/Regs/home.html#documentDetail?R=09000064800c084a>.

102. *See id.* Document Nos. IV-D-1 to -28, IV-F-1 to -12.

more than one hundred issues in contention.¹⁰³ Not surprisingly, moreover, this final rule and preamble gained still more girth—this time reaching 223 pages and over 195,000 words in the *Federal Register*.¹⁰⁴ With a statutory deadline looming, the agency pushed the rulemaking through in three-and-a-half years from start to finish.¹⁰⁵ Because of a vocal constituency of unhappy interest groups, however, the EPA reopened public comment on one of the rulemaking's key issues eighteen days after publishing the final rule, and received another sixty formal communications.¹⁰⁶ Before it could issue a revised rule, one of the regulated industries petitioned for reconsideration of the entire rulemaking.¹⁰⁷ The agency ultimately issued a proposed clarification to the original rule two years later, received another twenty comments on its proposed clarification,¹⁰⁸ and issued a final revised rule at the end of 1996.¹⁰⁹

Despite all this activity, the final rule offers no explanation as to why the regulation of storage tank emissions is so lenient and provides no indication that any stakeholders were unhappy with the approach. One can surmise that there were simply too many battles—each of them intricate and time-consuming—for the two public interest representatives and four state regulatory groups to keep up with all of the moving parts. One can also surmise that in sloggng through the more than one hundred significant contested issues addressed under a tight schedule, the agency itself had to tread lightly on issues for which the industry might have claimed superior

103. This number is based on counting each of the (significant) issues discussed by the EPA in Sections V and VI of the Final Rule. National Emission Standards for Hazardous Air Pollutants for Source Categories, 59 Fed. Reg. 19,401, 19,411–48 (Apr. 22, 1994) (codified at 40 C.F.R. pt. 63) (describing the comments and significant changes to the rule based on those comments).

104. *See id.*

105. The period of three-and-a-half years is based on comparing the date of the first document listed in the docket index authored after 1990, which is the year the EPA's mandate was passed by Congress, and the date of the first final rule. For the first document in the docket, dated August 10, 1990, see Hazardous Organic NESHAP Storage, Docket No. A-90-21, Document No. II-B-1, *available at* <http://www.regulations.gov/search/Regs/home.html#documentDetail?R=09000064800c084a>.

106. *See* Hazardous Organic NESHAP Process Vents, Docket No. A-90-19, Section VI (Sept. 14, 1992), *available at* <http://www.regulations.gov/search/Regs/home.html#documentDetail?R=09000064800c07be>.

107. *See id.* Document No. VI-B-63.

108. *See id.* Section VIII.

109. *See id.* Section IX.

knowledge.¹¹⁰ Alternatively, perhaps the agency threw bones to industry representatives as a way to get their buy-in on other issues—particularly when it suspected that those concessions would not be caught or litigated by public interest groups reluctant to delay the rule with litigation unless the litigation involved a crucial issue cutting to the very heart of the EPA’s air toxic program.

Ironically, demands by public interest groups that the EPA promulgate the rule on time and in keeping with Congress’s deadline¹¹¹ may actually make the information capture phenomenon worse. As lawyers know well, deadline suits are almost impossible to lose and serve a vital public purpose; without the suits, industry has no restrictions on their polluting activities, and the environment and public health are unprotected. In the context of information capture, however, these deadline suits put the agency between a rock (information battering by the industry) and a hard place (a deadline suit by environmental groups). When faced with lawsuits from all sides, the natural path of least resistance is to promulgate a final rule quickly and, if there is not time to respond to all of industry’s complaints, to give in to many of them just to get the rule out the door. As the nation’s top environmental lawyers, most of whom worked first for the EPA before advising industry, observe: “The reason that the Agency is generally receptive to well-reasoned technical comments [from industry] . . . [is to] withstand judicial review. The heart of a regulatory program is thus more likely to survive over the long term.”¹¹²

II. HOW ADMINISTRATIVE LAW ENABLES INFORMATION CAPTURE

The Administrative Procedure Act (APA)¹¹³ and related open government statutes create the perfect substrate for the growth and nourishment of information capture. Through a variety of judicially created requirements, the APA lays the groundwork for information gluts that can estrange marginally financed interest groups,

110. *See supra* note 103.

111. In fact, the EPA promulgated the air toxic emission standards just discussed under deadline litigation presumably brought by public interest groups that demanded that the EPA promulgate the standards in accordance with the congressional timeline. *See* National Emission Standards for Hazardous Air Pollutants for Source Categories, 62 Fed. Reg. 2722, 2722 (Jan. 17, 1997) (amending the final rule).

112. Field & Robb, *supra* note 31, at 50.

113. Administrative Procedure Act, 5 U.S.C. §§ 551–59 (2006).

undermine the hope of pluralistic engagement that could help the agency sift through at least some of the incoming information, and ultimately put the agency at the mercy of the party in control of most of the relevant information.

Administrative law instructs interest groups that if they plan to file comments that can be backed by legal challenge, then the comments need to cover the waterfront of their concerns and ideally do so in detail. At the same time, administrative law places no restrictions on the size, number, detail, or technicality of the issues that can be raised—the sky is the limit. As a result, parties can inadvertently or deliberately exert substantial control over the agency's agenda in the number, diversity, detail, and even the framing of the multiple comments they lodge, as well as with the information they share earlier in the process. As long as the court reviews the agency's action based on an unlimited record that commenters have a hand in creating, information becomes almost akin to a choke collar that can be used at the whim of interest groups to control the agency's factual record and even its policymaking agenda.

Even worse, agencies themselves develop coping strategies that can aggravate the information capture problem. If the agency receives reams of unprocessed material from interest groups and is held responsible for synthesizing it, then the agency's own process is likely to mirror these information pathologies, if not exacerbate them. An enormous record of highly technical and somewhat extraneous comments that delve into tedious and often unnecessary detail will tend to be reflected in the agency's own rule in order to avoid accusations of insufficient attention to detail. Such an opaque rule may have the added benefit of being more likely to escape rigorous judicial scrutiny and may even discourage thinly financed parties from taking on the rule as a litigation project. Along these same lines, if the agency must respond to all comments yet cannot change the rule substantially without starting over, then the agency will engage interested parties much earlier in the process of developing the rule, even though this might defeat the idea of ensuring balanced and vigorous participation by a diverse set of interest groups. Even litigation threats at the conclusion of a rule may cause the agency to develop nontransparent coping mechanisms for adjusting rules after the fact, an exercise made easier when the rule generally escapes understanding by most onlookers.

This Part isolates the various incentives caused by the “rulemaking review game”¹¹⁴ that not only tolerate excessive information but also produce incentives for players, including the agency itself, to overload the system with information or otherwise gain an edge through their superior access to key information. These rules of the game arise in part from the APA itself, but are both clarified and made more perverse through a series of judicial opinions that generally attempt, ironically, to make the process fairer. After this Part explores the ways that the law creates perverse conditions for information capture, Part III then surveys the current landscape for signs of damage.

A. Filter Failure in the Administrative Procedure Act

The APA displays great faith in the capacity of agencies in particular and the administrative state more generally to process information, no matter how overwhelming. This confidence is evidenced in nearly every nook and cranny of the APA. The APA’s command that “the agency shall give interested persons an opportunity to participate in the rule making through submission of written data, views, or arguments” is an inviolate principle for rulemaking.¹¹⁵ The Senate Report supporting the original APA aspired to ensure that an agency’s “notice must . . . fairly apprise interested parties of the issues involved, so that they may present responsive data or argument.”¹¹⁶ The Attorney General’s Manual on the APA, issued one year later, similarly recommends that “each agency should schedule its rule making in such fashion that there will be sufficient time for affording interested persons an opportunity to participate in the rule making.”¹¹⁷ Courts have taken these aspirations seriously. “If an agency does neglect to provide this information . . . and that neglect adversely affects a party’s ability to

114. This is Professor Mashaw’s term. JERRY L. MASHAW, GREED, CHAOS, AND GOVERNANCE: USING PUBLIC CHOICE TO IMPROVE PUBLIC LAW 166 (1999) (modeling out the “rulemaking review game,” which is governed by the basic idea that “to the extent that an opponent of rulemaking (regulatory or deregulatory) perceives the use of an external obstacle to rulemaking to have a higher expected value than failing to use it, that external constraint will be activated”).

115. 5 U.S.C. § 553(c).

116. 1 PIERCE, *supra* note 9, § 7.3, at 571 (citing S. DOC. NO. 79-248, at 200 (1946)).

117. *Id.* (citing TOM C. CLARK, U.S. DEPT. OF JUSTICE, ATTORNEY GENERAL’S MANUAL ON THE ADMINISTRATIVE PROCEDURE ACT 29 (1947), available at <http://www.law.fsu.edu/library/admin/1947cover.html>).

provide meaningful comments, a reviewing court will hold the rule invalid.”¹¹⁸

Accordingly, notice and comment—the period explicitly designed to open the doors to any and all information that any party wishes to provide—not only discourages agencies from placing any limits on the content, technicality, or volume of this information but also requires agencies to keep the period open long enough to ensure that anyone with information to share can participate.¹¹⁹ A rule can also be remanded if the agency has neglected—however inadvertently—to make a complete library of relevant documents available for commenters to use in formulating their arguments.¹²⁰

Agencies are further required by law to “consider,”¹²¹ which generally means to process and then respond to, all significant comments.¹²² If the agency does not do this, it again runs the risk that a court will reject its rule.¹²³ A court, for example, may remand a rule if the agency too quickly dismisses a comment as unduly vague or nonspecific and refuses to address the commenter’s concerns in the final rule.¹²⁴ As the Second Circuit held in reversing one of the FDA’s

118. *Id.* at 572 (citing *Global Van Lines, Inc. v. Interstate Commerce Comm’n*, 714 F.2d 1290 (5th Cir. 1983)).

119. *See, e.g.*, Edward Rubin, *It’s Time to Make the Administrative Procedure Act Administrative*, 89 CORNELL L. REV. 95, 114 (2003) (“Once the notice is given, anyone may send the agency a comment, and agencies always accept these comments (indeed, how could they not, unless they returned the envelope for insufficient postage?).”).

120. *See, e.g.*, *Gerber v. Norton*, 294 F.3d 173, 181 (D.C. Cir. 2002) (holding that the Fish and Wildlife Service’s failure to make the map of an offsite mitigation area available for public viewing in the issuance of an incidental take permit deprived plaintiff of the meaningful opportunity to comment and required that the case be remanded back to the agency).

121. 5 U.S.C. § 553(c) (2006).

122. *See generally* MARTIN SHAPIRO, WHO GUARDS THE GUARDIANS? JUDICIAL CONTROL OF ADMINISTRATION 44–49 (1988) (discussing the history of administrative law since 1946 and how the goal of expanding access to government led to the rule whereby interested groups could provide comments to rulemaking agencies that these agencies must consider); Stewart, *supra* note 6, at 1717–60 (discussing the importance of responding to comments in surviving judicial review).

123. *See United States v. Nova Scotia Food Prods. Corp.*, 568 F.2d 240, 245 (2d Cir. 1977) (reversing an FDA regulation governing good practices for whitefish in part because the FDA failed to respond to an important technical comment in its final rule); *see also Motor Vehicle Mfrs. Ass’n v. State Farm Mut. Auto. Ins. Co.*, 463 U.S. 29, 43 (1983) (holding that an “agency must examine the relevant data and articulate a satisfactory explanation for its action”).

124. *See, e.g.*, *Adams v. U.S. EPA*, 38 F.3d 43, 51–53 (1st Cir. 1994) (concluding that the EPA had erred in ignoring comments for vagueness and holding that the EPA had sufficient notice from the comments for materiality purposes, which imposed a requirement on the EPA to respond; because it had ignored the comments, the EPA’s resulting action was arbitrary and capricious).

good practices rules, “[i]t is not in keeping with the rational process to leave vital questions, raised by comments which are of cogent materiality, completely unanswered.”¹²⁵

As a result, agencies comply, perhaps too conscientiously, with the letter of the law. Even for the minor rules, the EPA typically prepares a one-hundred-plus-page report on its response to comments,¹²⁶ as well as anywhere from a few to dozens of pages of “significant changes” in the small, three-column type of the *Federal Register*.¹²⁷ “[I]n one major rulemaking, EPA wrote thousands of pages explaining how it resolved hundreds of issues based on its consideration of over one hundred studies and over one hundred thousand comments it received in response to its notice of proposed rulemaking.”¹²⁸

B. Courts Encourage Information Excess

In the abstract, courts would seem ideally suited to provide a reality check on Congress’s unrealistic faith in the agency’s ability to stay abreast of the avalanche of information that must be processed when developing a rule. But as lawyers fully appreciate, the courts’ substantive rules rarely succeed in simplifying processes and instead tend to make complex systems worse.¹²⁹ The courts’ interpretation of administrative law is no exception. In APA case law, the courts have generally reinforced, and even expanded, the incentives for information excess and filter failure.¹³⁰ They do this first by providing unintended rewards for agencies to develop rules that are more complex, detailed, and lengthy than needed to lower the risk of an

125. *Nova Scotia*, 568 F.2d at 252.

126. See BRUCE C. JORDAN, EPA, NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS (NESHAP) FOR PRIMARY ALUMINUM REDUCTION PLANTS—BACKGROUND INFORMATION FOR PROMULGATED STANDARDS, SUMMARY OF PUBLIC COMMENTS AND RESPONSES (1997), as an example of the type of document the EPA prepares for all rules, including smaller rules like this one, that explains the agency’s response to significant comments.

127. See *infra* notes 155–58 and accompanying text.

128. 1 PIERCE, *supra* note 9, § 7.4, at 595.

129. Cf. Carol M. Rose, *Crystals and Mud in Property Law*, 40 STAN. L. REV. 577, 578–79 (1988) (noting that courts can play a perverse role in “muddying” rules and that “straightforward common law crystalline rules have been muddied repeatedly by exceptions and equitable second-guessing, to the point that the various claimants . . . don’t know quite what their rights and obligations really are”).

130. Cf. MASHAW, *supra* note 114, at 126 (“It seems virtually undeniable that the major procedural developments in American administrative law from the Administrative Procedure Act to the present have been the work largely of the courts or of the chief executive.”).

adverse outcome in judicial review, and second by encouraging parties to inundate the agency with excessive information in order to make a record and protect all possible claims.

1. *Incentives for the Agencies to Conduct Informationally Excessive Rulemakings.* The courts' first unhelpful contribution to administrative process is to relegate to obscurity the one provision Congress did make for requiring agencies to filter information. In the APA, the agency is required to provide a "*concise general statement of [its] basis and purpose [for the rule].*"¹³¹ Congress intended this provision to force the agencies to ensure that their rules are accessible to the general public, as well as amenable to review by courts and the legislature. "The rationale of this requirement is to enable the public to determine the actual basis and objectives of the rule and to facilitate meaningful judicial review."¹³² With respect to its meaning, the provision was initially understood, even by the courts, to require agencies to explain in basic terms "what major issues of policy were ventilated by the informal proceedings and why the agency reacted to them as it did."¹³³

Despite the intent of the provision, courts hold an agency in violation of the "concise general statement" requirement only when the agency fails to provide enough information, not when it provides too much.¹³⁴ There appear to be no cases in which a court has rejected a rule because an agency's lengthy and highly technical preamble was not concise or comprehensible enough. By contrast, and although the agency need not discuss every minor facet of its proposal,¹³⁵ the courts

131. 5 U.S.C. § 553(c) (2006) (emphasis added).

132. 3 JACOB A. STEIN, GLENN A. MITCHELL & BASIL J. MEZINES, ADMINISTRATIVE LAW § 15.09, at 15-164 (1992) (citing, *inter alia*, ADMINISTRATIVE PROCEDURE ACT, H.R. REP. NO. 79-1980 (1946), *Am. Textile Mfrs. Inst., Inc. v. Donovan*, 452 U.S. 490 (1981), and various lower court decisions).

133. *Auto. Parts & Accessories Ass'n v. Boyd*, 407 F.2d 330, 338 (D.C. Cir. 1968).

134. *See, e.g., Indep. U.S. Tanker Owners Comm. v. Dole*, 809 F.2d 847, 854-55 (D.C. Cir. 1987) (holding that the Secretary of Transportation's statement of basis and purpose failed to provide an adequate account of how the rule served the Merchant Marine Act's objectives, and thus vacating the rule).

135. *See, e.g., MCI Worldcom, Inc. v. FCC*, 209 F.3d 760, 765 (D.C. Cir. 2000) ("An agency is not obliged to respond to every comment, only those that can be thought to challenge a fundamental premise." (citation omitted)); *Kennecott Copper Corp. v. EPA*, 462 F.2d 846, 850 (D.C. Cir. 1972) (upholding the EPA's general statement in setting air quality standards because the "regulation contains sufficient exposition of the purpose and basis of the regulation as a whole to satisfy this legislative minimum"); *Auto. Parts & Accessories Ass'n*, 407 F.2d at 332 (rejecting a claim that the statement was insufficient because certain details were lacking).

will remand rules for insufficiency when major issues are left unaddressed.¹³⁶ From this case law, Professor Richard Pierce concludes that “[t]he courts have replaced the statutory adjectives, ‘concise’ and ‘general’ with the judicial adjectives ‘detailed’ and ‘encyclopedic.’”¹³⁷

The demise of the concise general statement is just the beginning of the trouble, however. Not only do the courts reject the need for filters on the agencies’ communications (despite some congressional intent otherwise) but also their opinions greatly exacerbate the risk of information excess and inaccessible rulemakings. By far the strongest incentive for agencies to actively load their rule and record with details and defensive statements is the hard look doctrine.¹³⁸ This test emerged in the early 1970s as a way to increase oversight over what was then viewed as unbridled agency discretion and a serious risk of agencies being captured by the interests they were charged with regulating.¹³⁹ In hard look review, the court closely scrutinizes the agency’s rule to ensure that it has adequately considered all comments and supported its contested assumptions.¹⁴⁰ As the D.C. Circuit reminded the agencies: “What we are entitled to at all events is a careful identification by the Secretary, when his proposed

136. See, e.g., *Lloyd Noland Hosp. & Clinic v. Heckler*, 762 F.2d 1561, 1567 (11th Cir. 1985) (holding that the agency’s statement was inadequate because it “failed to give the facts underlying the conclusion”); *Nat’l Nutritional Foods Ass’n v. Weinberger*, 512 F.2d 688, 701 (2d Cir. 1975) (holding that the FDA has failed to provide an adequate statement supporting a rule because it lacked a “detailed record” or “thorough and comprehensible statement of the reasons for its decision” that establish the basis for the agency’s rule).

137. 1 PIERCE, *supra* note 9, § 7.4, at 596.

138. Professor Pierce argues that:

To have any reasonable prospect of obtaining judicial affirmance of a major rule, an agency must set forth the basis and purpose of the rule in a detailed statement, often several hundred pages long, in which the agency refers to the evidentiary basis for all factual predicates, explains its method of reasoning from factual predicates to the expected effects of the rule, relates the factual predicates and expected effects of the rule to each of the statutory goals or purposes the agency is required to further or to consider, responds to all major criticisms contained in the comments on its proposed rule, and explains why it has rejected at least some of the most plausible alternatives to the rule it has adopted.

Id. at 593.

139. See, e.g., Thomas W. Merrill, *Capture Theory and the Courts: 1967-1983*, 72 CHI.-KENT L. REV. 1039, 1043 (1997) (“[T]he courts’ assertiveness during the period from roughly 1967 to 1983 can be explained by judicial disenchantment with the idea of policymaking by expert and nonpolitical elites. . . . The principal pathology emphasized during these years was “capture,” meaning that agencies were regarded as being uniquely susceptible to domination by the industry they were charged with regulating.”).

140. See, e.g., *Ethyl Corp. v. EPA*, 541 F.2d 1, 68 (D.C. Cir. 1976) (Leventhal, J., concurring) (arguing for hard look review).

standards are challenged, of the reasons why he chooses to follow one course rather than another.”¹⁴¹ But when a rulemaking has dozens or even hundreds of moving parts, this puts agencies in a no-win situation. For substantial rules, the “reviewing court, assisted by able counsel for petitioners, almost always can identify one or more issues the agency addressed poorly in its statement of basis, and purpose.”¹⁴²

Adding to the litigation worries created by hard look review is the occasional demand by courts that the agency develop substantial evidence in support of its protective regulation.¹⁴³ The Supreme Court set the bar quite high for this substantial evidence requirement in *Industrial Union Department v. American Petroleum Institute* (the *Benzene* case).¹⁴⁴ In rejecting OSHA’s argument that the science was too uncertain to determine the precise level at which the carcinogen benzene became unsafe, the Court demanded that the agency assemble “substantial evidence” in support of its standards to survive judicial challenge.¹⁴⁵ In response to the Supreme Court’s *Benzene* decision, commentators observed that OSHA found itself forced to engage “in this exceedingly precise analysis with full knowledge that the estimates provided by existing risk assessment models could vary millionfold, depending upon the model selected.”¹⁴⁶ Other federal agencies also felt compelled to provide detailed technical

141. *Indus. Union Dep’t, AFL-CIO v. Hodgson*, 499 F.2d 467, 475 (D.C. Cir. 1974).

142. 1 PIERCE, *supra* note 9, § 7.4, at 614.

143. *Benzene* immediately produced ripples in the case law. In *Gulf South Insulation v. United States Consumer Product Safety Commission*, 701 F.2d 1137 (5th Cir. 1983), the Fifth Circuit overturned the Consumer Product Safety Commission’s ban on the use of urea-formaldehyde insulation in residences and schools and held that the agency’s supporting record was complete: “To make precise estimates, precise data are required.” *Id.* at 1146. Somewhat similarly, in *Leather Industries of America, Inc. v. EPA*, 40 F.3d 392 (D.C. Cir. 1994), the D.C. Circuit not only invalidated the EPA’s model because of the agency’s failure to refine the model to address specific activities, but also invalidated the EPA’s working assumption regarding the phytotoxicity of selenium, an assumption made necessary by limitations in available evidence: “While the EPA ‘may ‘err’ on the side of overprotection,’ it ‘may not engage in sheer guesswork.’” *Id.* at 408 (quoting *Am. Petroleum Inst. v. Costle*, 665 F.2d 1176, 1186–87 (D.C. Cir. 1981)). The court did not suggest, however, that the agency had ignored relevant information, nor did it explain how the EPA could go about gathering additional information.

144. *Indus. Union Dep’t, AFL-CIO v. Am. Petroleum Inst. (Benzene)*, 448 U.S. 607, 614 (1980).

145. See, e.g., ELIZABETH FISHER, *RISK REGULATION AND ADMINISTRATIVE CONSTITUTIONALISM* 107–12 (2007) (describing the more tolerant view of OSHA standard setting because of rampant uncertainties).

146. Thomas O. McGarity, *Some Thoughts on “Deossifying” the Rulemaking Process*, 41 DUKE L.J. 1385, 1403 (1992).

explanations for their standard-setting decisions to avoid the outcome reached in *Benzene*.¹⁴⁷

The agency's only responsible course of action when faced with these doctrinal demands is to engage in defensive overkill when developing rules.¹⁴⁸ In the rulemaking environment created by the case law, every comment that raises a credible-sounding issue, even a peripheral one, must receive a complete and detailed response. In preparing its rule for challenge, the agency will also work hard to support, or at least give the appearance of supporting, every assumption incorporated into the rule with information from the technical and scientific literature. Moreover, because the agency is not expected to be concise in its use of information, and because there is no requirement that this information be even moderately accessible to a general audience, there are no downsides for the agency to include pages of technical verbiage designed to fend off litigation. Indeed, it is rational for the agency to do so.

In practice, at least in contemporary judicial review, hard look review and *Benzene*'s demand for a substantial scientific record are the exception rather than the rule; most courts reviewing EPA technical rulemakings grant the agency considerable deference.¹⁴⁹ But

147. See, e.g., JOHN D. GRAHAM ET AL., IN SEARCH OF SAFETY: CHEMICALS AND CANCER RISK 151 (1988) ("Since the Supreme Court's 1980 benzene decision, federal agencies have felt compelled to use such numerical risk estimates to support both priority-setting and standard-setting decisions."); Frank B. Cross, *Beyond Benzene: Establishing Principles for a Significance Threshold on Regulatable Risks of Cancer*, 35 EMORY L.J. 1, 12-43 (1986) (arguing that judicial review forces agencies to provide detailed technical explanations for standards); Howard Latin, *Good Science, Bad Regulation, and Toxic Risk Assessment*, 5 YALE J. ON REG. 89, 132 (1988) ("[T]he Court's benzene decision has . . . induced federal agencies to conclude that they must provide quantitative risk estimates even if they lack confidence in the resulting judgments." (citation omitted)); Richard J. Pierce, Jr., *Two Problems in Administrative Law: Political Polarity on the District of Columbia Circuit and Judicial Deterrence of Agency Rulemaking*, 1988 DUKE L.J. 300, 311 (arguing that courts often require "that agencies 'find' unfindable facts and support those findings with unattainable evidence").

148. Professor Pierce describes what the agencies must do to avoid the risk that courts will remand their rules as arbitrary and capricious, which includes a demand that they

respond to all major points made in comments, state the factual predicates for its rule, support the factual predicates by linking them to something in the record of the rulemaking, explain its reasons for resolving issues as it did, relate its findings and its reasoning to decisional factors made relevant by its statute, and give reasons for rejecting plausible alternatives to the rule it adopted.

1 PIERCE, *supra* note 9, § 7.1, at 559.

149. SHEILA JASANOFF, SCIENCE AT THE BAR: LAW, SCIENCE, AND TECHNOLOGY IN AMERICA 91 (1995) ("Judicial withdrawal from the supervision of technical decisions in the 1980s avoided the pitfalls of overzealous review but only by reinstating an unrealistic and anachronistic vision of agency expertise."); R. SHEP MELNICK, REGULATION AND THE COURTS:

there remains a distinct risk that the agency will get unlucky and draw a hard look panel, and it is nearly impossible for an agency to know in advance what the panel's predilection will be.¹⁵⁰ Professor Jerry Mashaw observes that because of this significant unpredictability in the applicable standard of review, the courts essentially function "as robed roulette wheels churning out results—either 'case dismissed' or 'remanded to the agency for further development'—in a fashion that approximate[s] chance."¹⁵¹

It is this risk that the judicial roulette wheel will settle on a hard look standard that leads agencies to assume the worst.¹⁵² Professor R. Shep Melnick observes: "Since agencies do not like losing big court cases, they reacted defensively [to the courts' requirements], accumulating more and more information, responding to all comments, and covering their bets. The rulemaking record grew enormously, far beyond any judge's ability to review it."¹⁵³ And "[t]hus began a vicious cycle: the more effort agencies put into rulemaking, the more they feared losing, and the more defensive rulemaking became."¹⁵⁴ Indeed, not only is there no filter to limit the information agencies need to support their rulemakings, but also, from their perspective, providing excessive information is a winning strategy.

Although filter failure and information costs have not been factored directly into the scholarly complaints about the current state of judicial review, many critics do identify the adverse consequences associated with the unnecessary expansion of the rulemaking and accompanying record. Professor Pierce, a longtime critic of hard look review, argues that this unrestricted form of judicial scrutiny has

THE CASE OF THE CLEAN AIR ACT 356 (1983) (concluding that judges have wisely realized their own limitations and overturned only those standards that are based on "glaring error").

150. See ROBERT KAGAN, *ADVERSARIAL LEGALISM: THE AMERICAN WAY OF LAW* 223, 225 (2003) (underscoring how uncertainty in judicial review, coupled with adversarialism, leads to counterproductive delays and skews in the resulting influence and power of different groups affected by a rulemaking); MASHAW, *supra* note 114, at 165 (underscoring that "most seem to argue that the real impediment created by judicial review is uncertainty" in how courts will analyze the rule).

151. MASHAW, *supra* note 114, at 181.

152. See, e.g., 1 PIERCE, *supra* note 9, § 7.4, at 600–01 (discussing how *Motor Vehicle Manufacturers Ass'n v. State Farm Mutual Automobile Insurance Co.*, 463 U.S. 29 (1983), requires an agency to respond to all comments and criticisms and noting the resultant adverse effects that this has on the agency).

153. R. Shep Melnick, *Administrative Law and Bureaucratic Reality*, 44 ADMIN. L. REV. 245, 247 (1992).

154. *Id.*

forced agencies to engage in excessive data analysis and explanation, filling hundreds of pages of the *Federal Register* that courts ultimately “may, or may not, consider an adequate response to the 10,000–1,000,000 pages of comments” received.¹⁵⁵ In her study of the effects of judicial review on the EPA, Professor Rosemary O’Leary similarly concludes that “the proliferation of court decisions has forced what one EPA staff member called ‘non-user-friendly’ regulations. According to EPA technical staff, the Office of General Counsel often rewrites regulations, notices, and proposals in anticipation that a lawsuit is imminent. Lawyers have the last word in most EPA actions.”¹⁵⁶ And in an article on *Vermont Yankee Nuclear Power Corp. v. Natural Resources Defense Council, Inc.*,¹⁵⁷ Professor Richard Stewart also takes note of the informational consequences of hard look review:

In response to these [hard look] rulings, agency lawyers sought to bolster the agency’s position by elaborate documentation, while respondents and intervenors submitted contrary documentation which they themselves developed or obtained from agency files through Freedom of Information Act litigation. These various documents provided an elaborate record for judicial review¹⁵⁸

Yet even if the courts were consistently deferential, agencies might still perceive some benefits to producing records and rules that provide communications that are far more technical, lengthy, and detailed than needed or justified under the circumstances. An overly complex rulemaking offers an agency the benefit of exhausting its adversaries. The enormous size and breathtaking detail and technicality may even help discourage some courts that might otherwise be inclined to review the agency’s decision with some care. Professor Melnick speculates about “judicial exhaustion” that characterizes some courts’ reviews of agency actions.¹⁵⁹ In these cases,

155. Richard J. Pierce, Jr., *Waiting for Vermont Yankee III, IV, and V? A Response to Beermann and Lawson*, 75 GEO. WASH. L. REV. 902, 920 (2007).

156. Rosemary O’Leary, *The Impact of Federal Court Decisions on the Policies and Administration of the U.S. Environmental Protection Agency*, 41 ADMIN. L. REV. 549, 566 (1989) (citation omitted).

157. *Vt. Yankee Nuclear Power Corp. v. Natural Res. Def. Council, Inc.*, 435 U.S. 519 (1978).

158. Richard B. Stewart, *Vermont Yankee and the Evolution of Administrative Procedure*, 91 HARV. L. REV. 1805, 1812 (1978).

159. R. Shep Melnick, *Courts and Agencies 14* (n.d.) (unpublished manuscript), available at <http://www.bc.edu/schools/cas/polisci/meta-elements/pdf/melnick/courts-and-agencies.pdf>.

the courts may resort to a deferential approach simply because they lack the stamina to do anything else.

Thus, what began in 1947 as a hopeful, concise general statement rule has been transformed through sixty years of litigation into a lengthy, technical, and often incomprehensible jumble. The goal of hard look review may have been noble in theory, but in practice this form of judicial review appears to have led to precisely the opposite of what its proponents imagined.¹⁶⁰ Instead of providing a means for increasing meaningful oversight of agency rulemakings, hard look review causes the agency to prepare a defensive rulemaking that will tend to alienate some key interest groups (not to mention the general public) and all but the most energetic (or ideologically bent) judges.¹⁶¹

2. *Parallel Incentives for Interest Groups to Engage in Information Capture.* The incentives for information excess arising from judicial review affect not only the agencies but also the interest groups that participate in the rulemaking process. Case law sends a signal to these parties that is quite similar to that transmitted to the agencies; namely, to include in their comments highly specific, very detailed, extensively documented comments on every conceivable point of contention, and to back up their comments with the threat of

160. In advocating for hard look review, William Pedersen itemized the types of requirements that should be imposed on agencies. Note that, with the benefit of hindsight, it becomes clear how each of these requirements ultimately imposes cumulative information burdens on agencies that are likely to lead to excess from either the interest groups or the agency itself:

First, both the essential factual data on which the rule is based and the methodology used in reasoning from the data to the proposed standard must be disclosed for comment at the time a rule is proposed. To the extent they are not available at that time, they must be disclosed when they become available. Second, the agency's discussion of the basis and purpose of its rule—generally contained in the “preambles” to the notices of proposed and final rulemaking and in the accompanying technical support documents—must detail the steps of the agency's reasoning and its factual basis. Third, significant comments received during the public comment period must be answered at the time of final promulgation. However, comments must meet a standard of detail equal to that required of the agency in promulgating its rule before they will be considered significant. Fourth, only objections to the regulations which were raised with some specificity during the public comment period, and to which the agency thus had an opportunity to respond, may be raised during judicial review.

William F. Pedersen, *Formal Records and Information Rulemaking*, 85 YALE L.J. 38, 75–76 (1975) (footnotes omitted).

161. See, e.g., *id.* at 66–70 (describing how EPA attorneys play a large role in forming the administrative record and tend to include a great deal of material to protect the agency from suit); Melnick, *supra* note 153, at 256 (citing studies and concluding that because of aggressive judicial review, agency lawyers are the biggest “winners” as “[f]requently—especially on remand—they end up writing substantial portions of the regulations”).

litigation. Attorneys working primarily for industry stress that the most important task for their clients is to “build the best record” they can, observing that “[w]ritten comments are the single most effective technique” for doing so: “[m]ake sure that you submit to the Agency *all* relevant information supporting your concerns in the rulemaking. This is the best way to convince the Agency to respond favorably to your concerns.”¹⁶² Because there are no limits to the information that agencies are expected to process, there is no need for these commenters to provide succinct statements of their complaints. Instead, they can leave the task of processing the information to the agencies.

Several unrelated doctrines further reinforce the incentives for stakeholders to use information as an offensive weapon in their dealings with agencies. First, the courts generally require that only parties that file comments during the notice-and-comment period can later be involved in litigation against the agency.¹⁶³ This requirement originates from the notion that before seeking judicial redress, a party must exhaust its administrative remedies.¹⁶⁴ Some operative statutes also impose this requirement on rulemakings.¹⁶⁵

The courts’ demand that parties exhaust their administrative remedies was originally conceived of as a way to save agency resources, both by avoiding “premature interruption” of the rulemaking process and by bringing the courts into the picture only as a last resort.¹⁶⁶ But when viewed from the perspective of information, this requirement actually increases the burden on agencies. In order to preserve their claims, rational parties will react by erring on the side of providing too much rather than too little information. Indeed, the rule suggests not only that a party must file a comment before it can litigate but also that it must file *that same, specific comment*

162. Field & Robb, *supra* note 31, at 9–10 (collecting the most important advice from the top attorneys interviewed for their report).

163. *See generally* *McKart v. United States*, 395 U.S. 185 (1969) (setting out the reasons for exhausting remedies first within the agency before raising the issue with the court).

164. *See generally* Marcia R. Gelpe, *Exhaustion of Administrative Remedies: Lessons from Environmental Cases*, 53 GEO. WASH. L. REV. 1 (1985) (outlining the rationale behind the exhaustion requirement and arguing for the abolition of exceptions to the exhaustion requirement).

165. *See, e.g.*, Clean Air Act, 42 U.S.C. § 7607(d)(7)(B) (2006) (noting that “[o]nly an objection to a rule or procedure which was raised with reasonable specificity during the period for public comment (including any public hearing) may be raised during judicial review,” with limited exceptions).

166. *McKart*, 395 U.S. at 193–95.

before raising it in court. If a party neglects to raise an argument during the comment period, however preliminarily, it is generally foreclosed from raising the issue later.¹⁶⁷ Because the threat of litigation may be the only, or at least the best, way for stakeholders to get the agency's attention during the rulemaking process, they have strong incentives to lay the groundwork for future legal action by including every plausible argument in their comments.

Additionally, and more worrisome from the standpoint of information excess, the courts have held that more general comments from affected parties—even if lodged in writing and on time—are usually not material enough to matter legally.¹⁶⁸ To preserve issues for litigation, affected parties are thus best-advised to provide comments that are specific, detailed, and well documented.¹⁶⁹ This seemingly reasonable requirement for specificity again encourages interested parties to provide too much documentation, too many specifics, and too much detail, rather than too little.¹⁷⁰

Finally, the courts have signaled that the agency ignores these material comments at its peril.¹⁷¹ This, however, creates a situation in which interested parties can overwhelm the rulemaking process when it is in their interest to do so. With no limits on the extent or nature of the information they can file, the temptation to drown the agency in criticisms and accompanying documentation is likely irresistible, at least for some resourceful interested parties. As the D.C. Circuit remarked in a case with a record that spanned more than ten thousand pages:

167. See, e.g., *Natural Res. Def. Council, Inc. v. Thomas*, 805 F.2d 410, 419 (D.C. Cir. 1986) (holding that arguments not raised during the comment period may be foreclosed in later proceedings).

168. See, e.g., Gordon C. Young, *Judicial Review of Informal Agency Action on the Fiftieth Anniversary of the APA: The Alleged Demise and Actual Status of Overton Park's Requirement of Judicial Review "On the Record,"* 10 ADMIN L.J. AM. U. 179, 207 (1996) (“[T]he largely unenforceable requirement that agencies consider comments was translated into the real requirement that an agency, in explaining its decision, respond to any significant comment which challenged its rationality.”).

169. See, e.g., *Portland Cement Ass'n v. Ruckelshaus*, 486 F.2d 375, 394 (D.C. Cir. 1973) (holding that a commenter cannot merely assert that a general mistake was made, but must provide specific evidence and argumentation as to the nature of that mistake and its implications).

170. See *supra* notes 160, 164 and accompanying text.

171. See, e.g., 1 PIERCE, *supra* note 9, § 7.4, at 594 (“If a comment criticizes in detail some characteristic of the agency's proposed rule . . . and the agency retains that characteristic in the final rule without including in its statement of basis and purpose a relatively detailed response to that criticism, a reviewing court is likely to hold the rule unlawful . . .”).

The record presented to us on appeal or petition for review is a sump in which the parties have deposited a sundry mass of materials that have neither passed through the filter of rules of evidence nor undergone the refining fire of adversarial presentation. The lack of discipline in such a record, coupled with its sheer mass . . . makes the record of informal rulemaking a less than fertile ground for judicial review.¹⁷²

In his case study of an OSHA rulemaking, Professor Patrick Schmidt traces how the successful parties carefully laced the record with multiple grounds for suit and then used these issues to hold the agency hostage to their viewpoints.¹⁷³ On the other hand, when a participant fails to lodge comments and preserve its right to judicial review, the agency discounts and in some cases completely ignores their concerns.¹⁷⁴

In sum, the case law recommends that an interested party raise every possible issue and criticism in writing, in detail, and ideally with full documentation before the comment period closes. If this does not occur, the party effectively waives its opportunity to raise the issues in future litigation. Rational interest groups will respond to these legal incentives by raising every imaginable point of difference so as to preserve their right to judicial review. If an interest group thinks strategically, it will also consider the added bonus that its excessive communications and filings might even wear the agency down.¹⁷⁵

C. *Administrative Processes in the Shadows*

Because information is central to rulemakings, participants that enjoy privileged access to information may find that they also enjoy special advantages in the process. The agency becomes dependant on their counsel. Yet rather than correct for these information imbalances, the administrative process allows these groups to enjoy a

172. *Natural Res. Def. Council, Inc. v. SEC*, 606 F.2d 1031, 1052 (D.C. Cir. 1979) (citation omitted); *see also* *Aqua Slide 'N' Dive Corp. v. CPSC*, 569 F.2d 831, 837 (5th Cir. 1978) (observing that judicial review was complicated by the record, which consisted of a “jumble of letters, advertisements, comments, drafts, reports and publications . . . run[ning] for almost 2,000 pages . . . [with] no index”); *Fla. Peach Growers Ass'n v. Dep't of Labor*, 489 F.2d 120, 129 (5th Cir. 1974) (lamenting that the record is “some 238 documents occupying approximately two and one half feet of shelf space” that contains a mix of technical information).

173. *See* Patrick Schmidt, *Pursuing Regulatory Relief: Strategic Participation and Litigation in U.S. OSHA Rulemaking*, 4 *BUS. & POL.* 71 *passim* (2002).

174. *Id.* at 77.

175. *See infra* note 267.

further edge on their opponents by creating opportunities and incentives for agencies to meet with these particularly knowledgeable groups outside of the formal process. The APA does require communications between agencies and stakeholders to take place in the sunlight, but such communications are practically limited to the period between publication of the proposed and final rules. Both before and after this transparent process, informationally endowed stakeholders and agency staff can negotiate regulatory policies in the shadows, where they are typically free of mandatory docket and recordkeeping requirements. In these darkened settings, unnecessarily high information costs arise more from information inaccessibility than from information excess, and these costs fall exclusively on those groups that are not included in the *ex parte* communications. An analysis of the high information costs arising from the case law is thus not complete without a discussion of how some participants gain information-related advantages over others during these other stages of the rulemaking process.

1. *Participating in the Development of the Proposed Rule.* Despite the considerable attention devoted to open government as memorialized through notice and comment and judicial review, these events are only part of the larger rulemaking life cycle. Based on his experience as general counsel of the EPA, Professor E. Donald Elliott observes that “[n]otice-and-comment rulemaking is to public participation as Japanese Kabuki theatre is to human passions—a highly stylized process for displaying in a formal way the essence of something which in real life takes place in other venues.”¹⁷⁶ These venues range from “informal meetings with trade associations and other constituency groups, to roundtables, to floating ‘trial balloons’ in speeches or leaks to the trade press.”¹⁷⁷ Although proposed rules, on the surface, appear to be drafted by agency staff based on internal technical analyses, most of them are likely the result of extensive negotiations with interested parties that remain unrecorded and perhaps even unacknowledged. The only residual signs of this early dealmaking may arise in vague, post hoc rationalizations scattered throughout a proposed rule preamble.¹⁷⁸

176. E. Donald Elliott, *Re-Inventing Rulemaking*, 41 DUKE L.J. 1490, 1492 (1992).

177. *Id.* at 1493.

178. William Pedersen, then an attorney with the EPA, described how the “real” decisionmaking process for rules often occurred. See Pedersen, *supra* note 160, at 55–57. Most, if not all, of this information is considered “deliberative process” and thus is hidden from view.

There are several strands of judicial doctrine that inadvertently encourage agencies to work with affected parties in the shadows rather than in the sunlight as anticipated by the APA. First, and perhaps most importantly, the courts have made it painfully clear that if a rule is to survive judicial review, it must be in essentially final form at the proposed rule stage.¹⁷⁹ Material changes made after this point require a new notice-and-comment process and may even require the agency to start over.¹⁸⁰ To avoid the need to make “material” changes, the agency is eager to get it right the first time.¹⁸¹ In fact, the basic incentive for agencies to produce nearly complete proposed rules arises from the commitment to due process embedded by the courts into informal rulemakings, which in theory demands that parties have an opportunity to comment on all significant aspects of the rule.¹⁸²

The prospect of a seemingly endless cycle of notice and comment provides a powerful incentive for the agency to publish a proposed rule that has been heavily vetted before it is publicly aired as an informal proposal.¹⁸³ In doing so, the agency will find it in its interest to reach out to the most knowledgeable and litigious stakeholders. At

179. See, e.g., *Shell Oil Co. v. EPA*, 950 F.2d 741, 757–63 (D.C. Cir. 1991) (holding that the agency failed to provide meaningful notice-and-comment opportunities on issues in the final rule; the issues were raised by commenters during the notice-and-comment process); *Chocolate Mfrs. Ass’n v. Block*, 755 F.2d 1098, 1099–100 (4th Cir. 1985) (same); *Weyerhaeuser Co. v. Costle*, 590 F.2d 1011, 1021 (D.C. Cir. 1978) (same); see also *Env’tl. Integrity Project v. EPA*, 425 F.3d 992, 995–98 (D.C. Cir. 2005) (vacating an EPA rule setting forth monitoring requirements because the agency “flip flopped” after notice and comment and the final rule was not a logical outgrowth of the proposed rule, thus violating the APA’s notice-and-comment requirements).

180. See, e.g., Jack M. Beermann & Gary Lawson, *Reprocessing Vermont Yankee*, 75 GEO. WASH. L. REV. 856, 893–900 (2007) (criticizing courts for adding the requirement that agencies go through a second notice-and-comment process when the final rule is not the “logical outgrowth” of the proposed rule and discussing how this requirement impedes agency adaptability to new information during the notice-and-comment period). See generally 1 PIERCE, *supra* note 9, § 7.3 (discussing the extensive case law on whether an agency’s notice was adequate based on subsequent developments occurring after the proposed rule in the course of the rulemaking).

181. See, e.g., Elliott, *supra* note 176, at 1495 (“Because of the need to create a record, real public participation—the kind of back and forth dialogue in which minds (and rules) are really changed—primarily takes place in various fora well in advance of a notice of proposed rulemaking appearing in the *Federal Register*.”).

182. Cf. Rubin, *supra* note 119, at 111 (arguing that this type of procedural requirement is modeled after “due process” protections in adjudication).

183. See generally William F. West, *Formal Procedures, Informal Processes, Accountability and Responsiveness in Bureaucratic Policy Making: An Institutional Policy Analysis*, 64 PUB. ADMIN. REV. 66 (2004) (arguing that the pre-NPRM period provides rich opportunities for informal contacts and engagement by agencies with stakeholders).

the very least, these pre-Notice of Proposed Rulemaking (pre-NPRM) discussions will educate the agency about difficult technical issues and provide it with a means of anticipating and addressing these issues in the proposed rule without being caught off-guard. At most, engaging stakeholders in the development of a proposed rule may get their buy-in, making them less inclined to undo the proposed rule by filing material comments later in the process.

The agency is also well-advised to dump all it has learned from extensive pre-NPRM discussions directly into the preamble of the proposed rule.¹⁸⁴ Because there are effectively no filtering requirements on the agency's proposal, and because including all of this detail helps protect against the risk of material comments (which can set the process back), the incentives for information excess in proposed rulemakings are again unequivocal. The agency's rational response to these incentives, however, raises the risk that the proposed rule and the final rule will be much less accessible, particularly to those who were not involved in pre-NPRM negotiations.¹⁸⁵ If affected parties have been left out of pre-proposed-rule discussions and are faced with the prospect of processing and critiquing a one-hundred-page, opaque explanation and discussion during a short notice-and-comment period, it is at least possible that they will choose to forgo this rather time-intensive exercise.¹⁸⁶ Creating a voluminous record may thus ultimately benefit the agency by lowering the risk of material comments and limiting the total number of comments in need of response.

Ideally, the courts would foreclose substantive communications between stakeholders and the agency that do not occur in the sunlight. Instead, they allow the agency to freely negotiate its rules during the pre-proposed-rule process without the significant encumbrance of transparency requirements. The agency must log its *ex parte* contacts in the public record only after publishing the proposed rule and generally not before.¹⁸⁷

184. See *infra* notes 237-42 and accompanying text.

185. See, e.g., Elliott, *supra* note 176, at 1492 ("What was once (perhaps) a means for securing public input into agency decisions has become today primarily a method for compiling a record for judicial review. No administrator in Washington turns to full-scale notice-and-comment rulemaking when she is genuinely interested in obtaining input from interested parties.").

186. See *infra* Part III.A.

187. See, e.g., *Home Box Office, Inc. v. FCC*, 567 F.2d 9, 57 (D.C. Cir. 1977) (holding that "communications which are received prior to issuance of a formal notice of rulemaking do not,

In these darkened settings, unnecessarily high information costs can arise, not only from excessive detail in the agency's proposal, but also from the fact that some of this detail may be unexplained and effectively unintelligible to those who did not take part in pre-NPRM deliberations. Still more problematic, the added costs generally fall on only one sector—in environmental rulemakings, this is often the same sector of affected parties that is already strapped for resources to participate. Somewhat ironically, processes intended by the courts to help ensure that rulemakings are accessible and accountable to the public are responsible for causing this inequitable access.

2. *Renegotiating the Final Rule After Publication.* Rulemaking in the shadows occurs again after the rule is finalized, but this time the agency's interest in continuing to work on the rule arises only in cases in which a party has filed, or perhaps threatens to file, a petition for judicial review. During this post-rule litigation, court processes impose some structure on the parties. These court processes, however, require only very limited transparency for negotiations that take place between the litigants.¹⁸⁸

Litigation thus opens the doors to a second round of negotiations that, even more than the pre-NPRM period, can involve secret deals over details, interpretations, and related features of a rule with only a narrow slice of the affected interests.¹⁸⁹ In his study of the EPA's Resource Conservation and Recovery Act (RCRA) rulemakings, for example, Professor Cary Coglianese concludes that post-rule "litigation offers interest groups and the agency an opportunity to do

in general, have to be put in a public file. . . . [but] [o]nce a notice of proposed rulemaking has been issued . . . any agency official or employee who is or may reasonably be expected to be involved in the decisional process of the rulemaking proceeding, should [avoid ex parte contacts and place any such contacts in the public file]").

188. Even after a court opinion is issued, negotiations often continue and can lead to mutually accommodating resolutions. *See, e.g.*, Coglianese, *supra* note 47, at 118–20. But it seems more likely that in these post-opinion negotiations, accountability is slightly higher not only because the results are more visible but because the options have been potentially limited by the court's ruling and by the litigation process itself, which tends to tee up and simplify the issues under dispute.

189. As one regulator insider summarized in an interview with Professor Coglianese:

I see this litigation as just a continuation and a narrowing of the regulatory process, and I think most of the players do too. . . . Once it's all over at the official stage, you start the second stage and you start it by filing litigation so that you can be at the table and work it out with only those people who are really interested. You've narrowed the universe from the general public down to those who really care, and you can get down to business. Litigation just happens to be the way you do it.

Id. at 108.

something they were not permitted to do in the notice-and-comment period: negotiate in secret.”¹⁹⁰ A trade association’s general counsel elaborated: “[Litigation] is often a vehicle to kind of lead to a revision of regulations. . . . There are a number of cases that are filed and automatically stayed because we are filing them just so we go back to the agency and basically kind of renegotiate the regs.”¹⁹¹ Another corporate counsel remarked: “It is almost like having another rulemaking with those people who care enough about the issues to spend the time, being the ones who get to play.”¹⁹² These negotiations also “hold an added degree of secrecy given their privileged status”¹⁹³ and can help “immunize agency officials from oversight by third parties such as the Office of Management and Budget.”¹⁹⁴ Information costs rise as accountability mechanisms decline at this late stage in the rulemaking.

In most cases, there is also a fair amount of room remaining in the post-rule stage to negotiate with respect to the substance of a rule. Although any direct changes to the rule’s text must go through a new notice-and-comment period, other changes, including official interpretations, policy guidances, and enforcement priorities, escape this fate.¹⁹⁵ As Professor Schmidt found in his case study, these interpretive guidances can be sufficiently meaningful to lead a litigant to voluntarily dismiss its case.¹⁹⁶

The significance of post-rule negotiations is spotlighted in Professor Coglianese’s study but is surprisingly unexplored elsewhere in the literature. To the extent that post-litigation settlements occur—and Professor Coglianese’s findings suggest that they occur frequently¹⁹⁷—they provide yet another vehicle for driving up

190. *Id.* at 107.

191. *Id.* at 88.

192. *Id.* at 91.

193. *Id.* at 107.

194. *Id.* at 131.

195. *See, e.g.*, Richard Stoll, *Coping with the RCRA Hazardous Waste System: A Few Practical Points for Fun and Profit*, 1 ENVTL. HAZARDS 6, 6 (1989), *reprinted in* PERCIVAL ET AL., ENVIRONMENTAL REGULATION: LAW, SCIENCE, AND POLICY 257 (2d ed. 1996) (describing how the EPA’s private letters, obscure guidance documents, and hidden statements in unrelated final rule preambles have given industry participants considerable wiggle room in satisfying compliance requirements in hazardous waste rules).

196. *See* Schmidt, *supra* note 173, at 74 (highlighting the significance of interpretive guidance).

197. Professor Coglianese found that at least one petition for judicial review was filed for 35 percent of significant RCRA and Clean Air Act rules. Coglianese, *supra* note 47, at 66 tbl.3-2.

information costs for outsiders who are not included in the negotiations. It is particularly problematic that these secret negotiations with a small group of affected parties occur in response to the liberalized judicial review process, a legal intervention that was intended specifically to heighten rather than reduce agency accountability.

D. Administrative Law and Information: A Conceptual Summary

Administrative law is not simply passive in its tolerance of unlimited information; it exacerbates the problem of information excess by creating multiple incentives for rulemaking participants to overload the system with a variety of information costs. The rulemaking review game, for example, produces incentives for stakeholders to fill the record with intricate details, raise every conceivable argument, err on the side of including attachments that may not be terribly helpful, engage in negotiations outside of formal notice-and-comment parameters, and raise every litigation threat within their grasp. For their part, agencies are foreclosed from trying to limit the information presented to them. They must respond to all material comments, no matter how many, how technical, or how poorly framed. They must solicit input and keep comment periods open until everyone has the chance to submit volumes of information. They, too, face incentives to present their analysis in undigested, often incomprehensible form to the larger public and, perhaps worse, to work closely with at least some affected parties in the shadow of the APA, before proposing a rule and after publishing the final rule.

The resulting process treats information as an undiminishing good that not only welcomes excessive information but also encourages it at all stages of the process. In a system that rewards interest groups for creating elaborate records for review and agencies for delving into minute details to insulate their rules from attack, regulatory participants come to understand that “the more information, the better.” In fact, a related empirical study of EPA air toxic rules found exactly this relationship between information input and output, at least during notice and comment: as comments increase, so do changes made to the rules.¹⁹⁸

Nearly half of those challenges were voluntarily dismissed, *id.* at 97 n.17, suggesting that many of those cases involved settlement.

198. See, e.g., Wagner et al., *supra* note 37, at 21 tbl.8.

Yet common sense, contemporary scholarship, and basic economic models all predict that there is a point of diminishing returns on information, at least if there is some limit on the time and resources available to the agency to process the input.¹⁹⁹ One way the resulting quality of decisions could drop, for example, is when the information becomes so excessive and detailed that it must be processed by agency contractors who, in turn, suggest cumulative addenda to the rule in rote fashion that further mire the rule down in unnecessary complexity and detail. Problems arise not only because parties naturally load excess information into the system, but also because the system's inattention to information excess provides opportunities for strategic action. Clever participants can use excessive filings to deliberately move the rulemaking into more hopeless areas of information overload so that they may gain control over outcomes or throw the regulatory process into dysfunction. Adversarial or more balanced contests between interest groups, when they do occur, may spotlight the main issues and overcome judicial and administrative incentives for information overload by forcing the rule into the information sweet spot of political and administrative oversight. But for complex rules, this jump down the information incline is likely to be the exception rather than the rule.

III. CONSEQUENCES

“The ‘rules of the game’ powerfully affect who wins, who loses, or who even is allowed to play.”²⁰⁰ The rules of the game discussed in the previous Part tolerate unlimited and unnecessarily excessive information; create positive incentives for participants to control the agency agenda with excessive and nitpicking filings; and ultimately encourage the agency to work more closely with these participants, largely out of the reach of the APA, which in turn allows them to gain an information-based edge over their opponents.

This Part considers consequences that logically flow from this game. If all participants and agencies behave rationally in response to these rules, what are the consequences for policymaking and

199. See *supra* notes 66–67 and accompanying text.

200. CHRISTOPHER J. BOSSO, PESTICIDES AND POLITICS: THE LIFE CYCLE OF A PUBLIC ISSUE 13 (1987); see also CROLEY, *supra* note 39, at 69 (arguing that “focusing only on decisionmakers’ incentives, motives, and goals without consideration of how they are shaped, reinforced, and altered by the decisionmaking procedures will yield incomplete understandings of regulatory outcomes”).

accountable government? The analysis makes a best-case assumption that the agency is generally operating in good faith and—all things being equal—would prefer to make its rules accessible and its results democratically responsive. The analysis does not, in other words, assume that the agency acts secretly or on behalf of politically preferred constituencies or is subject to capture in the more traditional sense. The reason for this optimistic assumption is that it catches the more pessimistic view of agencies as well. If agencies unintentionally produce rules that are inaccessible and lead to imbalanced participation, it is easy to see how they could do so deliberately by making the discussions unintelligible.

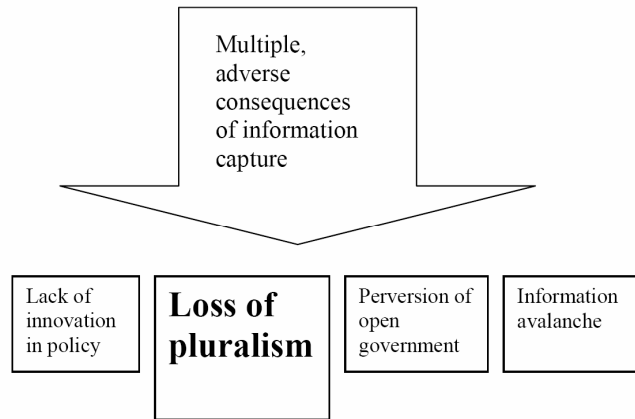
In this discussion, however, it is important to put the problem of information capture and filter failure within the larger administrative context. Administrative law scholars have long worried about a variety of maladies that impair the agencies' ability to do their job of producing high-quality and democratic-resembling rules. Scarce and diminishing resources of agencies with an increasing workload, assaults on the integrity of agency staff that take a toll on morale and on the recruitment and retention of the best and brightest, and gradual White House takeover and reversals of agency decisions that reduce agency independence and motivation all are understood to impair the quality of regulatory decisionmaking.²⁰¹ Information capture does not overwhelm these other, simultaneous problems, but rather moves in the same direction. The extent to which the consequences or outcomes discussed here are specifically linked to information capture as opposed to agency impotence or malaise is impossible to determine. Nevertheless, because the forces operate simultaneously and generally in complementary ways, it seems likely that at least some of the consequences can be attributable to information capture.

This Part highlights four main consequences that emerge from information capture, the first of which—the loss of pluralistic oversight—is the most significant and thus is discussed in the most detail. This Part's three remaining Sections explore other adverse consequences of filter failure and information capture for agency

201. For a comprehensive discussion of these problems, see generally RENA STEINZOR & SIDNEY SHAPIRO, *THE PEOPLE'S AGENT: EXECUTIVE BRANCH ACCOUNTABILITY AND SECRECY IN AN AGE OF TERRORISM* (forthcoming 2010), and Richard J. Lazarus, *The Tragedy of Distrust in the Implementation of Federal Environmental Law*, 54 *LAW & CONTEMP. PROBS.* 311 (1991).

governance, which include the inhibition of creative policymaking, the limitations of transparency and open government as means for ensuring agency accountability, and the difficulties of reversing information excesses once they have entered the system. Figure 2 diagrams these consequences, a schematic that not only forms the organization for this Part but also becomes the template for reforms discussed in the final Part.

Figure 2. A Schematic of the Adverse Consequences of Information Capture



A. Implications for Pluralistic Oversight

The administrative state is built on an assumption that pluralistic processes will provide the primary means for keeping agencies accountable. Rigorous engagement by a diverse and balanced assortment of affected interests, reinforced by an ability to challenge regulations in court, equates roughly with a form of democratic oversight. Professor Edward Rubin argues that this pluralistic engagement is so important to current conceptions of administrative process that the APA is essentially a “one-trick pony”: “[a]ll of its basic provisions rely on a single method for controlling the actions of administrative agencies, namely, participation by private parties.”²⁰² Indeed, even in the Attorney General’s Report that helped make the case for the APA’s passage, the need for pluralistic oversight of

202. Rubin, *supra* note 119, at 101.

agencies was considered pivotal to the success of the administrative state: “[p]articipation by these groups [economic and community-based] in the rule-making process is essential to permit administrative agencies to inform themselves and to afford adequate safeguards to private interests.”²⁰³

Scholars writing in administrative law echo this faith in pluralistic processes and observe its success over the decades, with particular emphasis on environmental regulation.²⁰⁴ Professor James Q. Wilson, for example, observes: “EPA has had to deal with as many complaints and lawsuits from environmentalists as from industry, despite the economic and political advantages industry presumably enjoys.”²⁰⁵ In their study of interest group politics, Professors Burdett Loomis and Allan Cigler conclude that by the early 1980s, a “participation revolution” had arisen comprising citizens and special interest groups seeking collective material benefits for the public at large: “[t]he free-rider problem has proven not to be an insurmountable barrier to group formation, and many new interest groups do not use selective material benefits to gain support.”²⁰⁶ Professor Christopher Bosso adds to this positive characterization in his study of pesticide politics: “[b]y the mid-1980s, however, we find a diversity in representation that, on the surface at least, gives pluralists some vindication.”²⁰⁷ More recently, in his book on public interest regulation, Professor Steven Croley argues that “[w]hile one can still distinguish among regulatory decisions according to the amount of public attention they generate or the number of outside participants they involve, few agency decisions with significant stakes escape public attention or participation completely. Regulatory decisionmaking is seldom done in the dark anymore.”²⁰⁸

The conventional wisdom that environmental rulemakings are subject to input from a diverse and wide range of affected parties is

203. ATT’Y GEN.’S COMM. ON ADMIN. PROCEDURE, FINAL REPORT 103 (1941).

204. See, e.g., Stewart, *supra* note 6, at 1683 (“Today, the exercise of agency discretion is inevitably seen as the essentially legislative process of adjusting the competing claims of various private interests affected by agency policy.” (footnote omitted)).

205. WILSON, *supra* note 50, at 385.

206. Burdett A. Loomis & Allan J. Cigler, *The Changing Nature of Interest Group Politics*, in INTEREST GROUP POLITICS 1, 11 (Allan J. Cigler & Burdett A. Loomis eds., 1983).

207. BOSSO, *supra* note 200, at 245. This is in part because “[e]nvironmental policies, by their nature, prompt acrid disputes among equally determined and almost permanently mobilized sets of claimants because they exhibit structures of incentives more contagious to conflict than do agricultural subsidies or water projects.” *Id.* at 252.

208. CROLEY, *supra* note 39, at 291–92.

further reinforced by the work of Professors Cass Sunstein and then-Judge Stephen Breyer. They both write about a regulatory system that they worry is too easily influenced by misinformed public opinion and even hysteria that derails sensible regulation and leads to inefficient pollution standards.²⁰⁹ Their reforms attempt to circumvent these public passions and biases through the use of more rational regulatory tools and expert bodies.²¹⁰

The existence of filter failure and the possibility of information capture, however, cast doubt on these optimistic portrayals of the regulatory process, at least for a potentially important area of regulatory activity in which information costs are particularly high.²¹¹ This is because information costs not only substantially increase the costs of participation, particularly for groups that lack inside information, but also—through the resulting clouding of the issues—work simultaneously to reduce the payoff or benefits of participation for these same groups.²¹² The escalating information costs, in turn, may tilt the playing field so significantly against those with the least resources that the natural pluralistic processes that underlie rulemaking systems cease to function.

This Section collects evidence of possible imbalance in interest group engagement in EPA rulemakings in which information costs are likely to be very high and uncontrolled by adversarial counterpressure. Preexisting sources of imbalances in participatory capabilities among sectors of affected interests are considered first. Layered on top of this asymmetry are additional information

209. See, e.g., STEPHEN BREYER, *BREAKING THE VICIOUS CIRCLE: TOWARD EFFECTIVE RISK REGULATION* 33 (1993) (describing how public perceptions trigger a “vicious circle” of legislation and regulation of trivial risks that impose unjustified costs on regulated parties); Timur Kuran & Cass R. Sunstein, *Availability Cascades and Risk Regulation*, 51 *STAN. L. REV.* 683, 741 (1999) (discussing how salient and accessible claims about environmental risks, often promoted by public interest groups, can cascade through the public to lead to unsupported urgent calls for regulation of trivial risks, and offering recommendations for insulating civil servants from these mass demands).

210. See, e.g., BREYER, *supra* note 209, at 68–72 (recommending that an elite group of “super regulators” make regulatory decisions rather than basing regulations on public preferences, as is currently the case); Cass R. Sunstein, *Cognition and Cost-Benefit Analysis*, 29 *J. LEGAL STUD.* 1059, 1060 (2000) (recommending the use of cost-benefit analysis to correct for numerous cognitive deficits in public assessment of risk); see also CASS R. SUNSTEIN, *THE COST-BENEFIT STATE: THE FUTURE OF REGULATORY PROTECTION passim* (1996) (recommending the use of cost-benefit analysis to correct for various undesirable effects of public governance).

211. See *supra* Part I.B.

212. See *supra* notes 42–46 and accompanying text.

advantages arising from the administrative process that accrue primarily to regulated parties. These additional advantages are discussed in the second Section. As regulatory proposals become more detailed and costly to penetrate, due in part to the heavy engagement of a narrow slice of affected parties earlier in the process, public interest groups continue to drop out during the public notice-and-comment process, a problem discussed in the third Section. The final Section then considers countervailing institutional mechanisms for representation of less well-financed interests and finds them lacking. The cumulative result is a badly skewed participatory process. Information capture is not the only explanation for a breakdown in pluralistic oversight mechanisms, but it is the primary contender and, at the very least, should be taken seriously.

Before continuing, it is important to underscore that information capture will not afflict all rules. Some rulemakings are very much in the public eye, despite their complexity, and thus manage to rise above the battles over details in ways that highlight their implications for a broader audience. In these settings, a balanced array of interest groups compete for the short attention span of political officials and the public, dedicating considerable time to determining how to make their case persuasively. The resulting, self-imposed filtering of information and more balanced engagement evidenced in these rules occur because natural pluralistic processes are working. In his book, Professor Croley provides compelling case studies of such high-visibility rules promulgated by several agencies, including the EPA.²¹³ His case studies focus on examples that not only involved vigorous engagement by the public interest community but were actually triggered by petitions filed by these very groups.²¹⁴ These rulemakings, however, may well be the exception rather than the rule, at least at the EPA.²¹⁵

The exploration of the information capture phenomenon in this Part considers only those rules that generally do not make it into the newspaper and are largely obscure to the public, even though they make an important contribution to the protection of public health and

213. These are the case studies that Professor Croley considers in his book. *See* CROLEY, *supra* note 39, at 242 (conceding that his primary case studies were all prompted by lawsuits by public interest organizations against the agencies).

214. *See id.* at 242–43.

215. *See supra* Part I.B; *infra* Part III.B.2–3.

the environment.²¹⁶ It is difficult to determine how many rules fit into this group relative to newsworthy rules. But the fact that the EPA promulgates more than three hundred rules per year, coupled with the fact that most of the EPA's rulemaking assignments involve highly technical pollution control regulations,²¹⁷ suggests that a significant share of EPA rulemakings might be susceptible to information capture.

1. *The First Challenge for Pluralistic Oversight: Basic Imbalances in Resources and Information.* The most obvious way that filter failure exacerbates preexisting imbalances in interest group participation is by making the costs of participation much higher than necessary—so high that in many cases, it functions as a barrier to entry. When a regulatory participant is not required to filter the information it shares with the agency—indeed, when the system actually *encourages* information excess—then other participants may find themselves investing a good deal of resources and energy merely trying to keep up with the flood of issues and information, much of which might be peripheral or even irrelevant. As a strategic matter, excessive detail, technical issues, and side-bars may help price out these less well-financed adversaries, or at least drive up their costs of engaging in the regulatory exercise.

Pluralistic processes are undermined by a system that becomes oblivious to the costs imposed on participants to engage in a meaningful way, particularly when there is no chance of fee reimbursement at the end of the process. Groups that already struggle against organizational and related collective action impediments to represent the public interest cannot keep up. In such a system, the rich become richer (or at least more dominant) by glutting the system with information excess, forcing their opposition out of rulemaking proceedings.²¹⁸

In regulatory settings characterized by escalating information costs, it is generally (but perhaps not always) the public interest groups that find themselves on the short end of the participation stick. The resources of public nonprofits are typically smaller in comparison

216. See *supra* Part I.B.

217. See *supra* note 80 and accompanying text.

218. This is precisely Professor Gormley's intuition in identifying "complexity" as one of the two variables that can cause regulatory problems to fall out of direct mechanisms of public oversight and engagement. See Gormley, *supra* note 52, at 597.

to their regulated opponents, particularly with respect to the resources available to participate throughout the entire rulemaking life cycle.²¹⁹ It is also the case that these public interest groups have a stake in almost all of the EPA's rulemakings; regulated parties, by contrast, will find only a few rules directly relevant to their individual operations.²²⁰ As a result, environmental nonprofits have much less to spend and far more to spend it on, as compared to particular industries. These cumulative disparities in resources do not mean that public interest groups cannot be effective, but it underscores how they must pick their battles among rules.²²¹

There is one last source of possible disparity in participation that arises from differing levels of access to key information relevant to the rule. Some of this critical information is more readily available (due to greater access and specialized knowledge) to some groups than to others. Regulated industries, for example, enjoy considerably more inside information about how their plants run, how pollution control equipment might or might not work once in place, what approaches have and have not been considered or tried, and a host of other technical issues central to the rulemaking.²²² In these rulemakings, the cost for a nonprofit to participate is higher relative to its industry counterpart because of the added resources necessary for them first to access and then to master such technical, inside information. Thus, public interest groups not only have fewer resources but also may face higher costs to participation per rule than their adversaries.

Resource and information disparities are only the beginning of the trouble when it comes to ensuring pluralistic oversight of complicated rulemakings. The remainder of this Section highlights more subtle but potentially significant information-related factors that further increase the gap between the haves and have-nots as they participate in highly technical and complex EPA rules.

219. See generally HREBENAR, *supra* note 40, at 261–67, 329–30 (describing underfunded public interest groups); Stewart, *supra* note 6, at 1767–70 (describing the same and highlighting process-related handicaps that result from imbalance).

220. Cf. *supra* note 40 and accompanying text.

221. It might be further argued that the stakes for these regulated industries are actually higher per capita than for environmental nonprofits. But because this involves incommensurables—life versus profit losses—it is more contestable. In any event, because this added skewing factor only further tilts the rulemaking toward the regulated industry, it can be bracketed as yet another reinforcing factor for purposes of argument.

222. See *supra* note 87 and accompanying text.

2. *The Second Challenge for Pluralistic Oversight: Information Symbiosis between the Agency and Regulated Parties.* The administrative process encourages the agency to know its enemies, at least if these groups hold in their possession technical facts and details that might prove particularly successful in challenging the rule later.²²³ Interest groups with extra knowledge or facts relevant to a rule are likely to enjoy special participatory advantages in the process and may even find themselves working side-by-side with the agency as it develops its proposed rule.

In most complex rulemakings, the agency appears to be quite dependant on knowledgeable stakeholders to educate it about critical issues peculiarly within their grasp. Such communications can be quite a bonus for these select groups, too, providing them with the opportunity to shape or even frame the agency's regulatory project in the course of their tutorials and informal discussions. Despite the dangers of this pre-proposal intimacy, the agency as a legal matter appreciates that if it does not engage in this type of due diligence and reach out to the most knowledgeable stakeholders, they are likely to torpedo its final rule using specialized information to support their contention that the rule will pose undue costs, operational difficulties, or a range of other hardships. Conveniently, the law also places no restrictions on preproposed rule communications with interest groups. Conferences, meetings, telephone conversations, shared drafts of a proposed rule, and the like are not limited, and need not even be recorded in the rule's administrative record if the agency prefers to keep them under wraps.²²⁴

Under these circumstances, even agency staffers skeptical of industry claims may actively seek out industry's help in developing

223. As Professor Croley notes, "agencies depend upon information to do whatever they aim to do. Those with the most information, with the most credible and verifiable information, will have a greater opportunity to influence administrative decisionmakers." CROLEY, *supra* note 39, at 135. He suggests, however, that this neutral test of providing valuable information means that administrative processes produce a leveling effect on participation. *Id.* at 136. But this logical inference neglects the information costs and the possibility that they can be so high as to actually screen participation or viable engagement.

224. Interested parties engaged in these communications, however, will include them in the administrative record when it suits their purpose. In some cases, interest groups even request EPA background documents through the Freedom of Information Act and include them in their comments to make sure they are part of the record. *See, e.g.,* Pedersen, *supra* note 160, at 68-70 (observing that "this tactic [to use FOIA to access agency documents and then to communicate them back to the agency to ensure that they make their way into the administrative record] has worked fairly well for those who use it, even though the statute probably wasn't intended for that purpose").

the proposed rule to reduce the risk of successful challenges down the road. As one agency staffer put it, “[w]e help them; they help us.”²²⁵ These relationships do not necessarily form because staff members hope to be employed later by industry, because they enjoy meals and conferences in luxurious locations, or even because they are directed by an appointed agency official to “play nice” with favored interest groups, as traditional capture predicts. Under the analysis here, working relationships, primarily with regulated parties, form at the pre-proposal stage in large part because of the agency’s desire to produce a rule that withstands judicial review.²²⁶ For environmentally minded staff eager to get the final rule in place so as to create some binding requirement on the polluting activities of industry, such pre-NPRM collaborations are legal necessities.

The incentives for industry to engage in rule development before publication of the proposed rule are substantial as well. Given the high level of deference that typically occurs during judicial review, regulated parties will perceive major advantages to getting in at the ground floor, before the proposed rule is published.²²⁷ By contrast, public interest groups are likely to face fewer incentives to invest their scarce resources heavily in pre-NPRM communications because they will face various difficulties getting credit for gains won at this early, informal stage. That is, one cannot trace cause and effect as easily at this stage, nor would the agency necessarily engage openly with groups that did advertise the gains won during pre-NPRM communications. To the extent that administrative processes encourage agencies to work closely with industries in the development of the proposed rule, then, they may create significant imbalances in interest group representation at this critical stage of the rulemaking process.

There is little scholarly attention to these incentives for extensive pre-NPRM interest group communications, but what has been written

225. Coglianesse, *supra* note 47, at 9.

226. Specifically, one attorney interviewed in the Field and Robb report observed:

The reason that the Agency is generally receptive to well-reasoned technical comments, explains Rogers, is that if you point out specific problems with a regulatory program, then those drafting the rules will generally try to solve those problems. They will do so not only because they want to appear to be reasonable and responsive to public comments, but also because their willingness to refine a regulatory program—to address identified flaws in the program—should help that program withstand judicial review.

Field & Robb, *supra* note 31, at 50.

227. *See supra* Part II.B.1.

presents a persuasive case that early contacts with interest groups, particularly those with specialized knowledge, are likely to be both extensive and influential.²²⁸ The scant systemic evidence currently available confirms these predictions. In a preliminary study examining interest group participation in EPA rules governing hazardous air pollutant standards, industry had on average more than seven hundred times more docketed communications (meetings, letters, and telephone calls) with the EPA during the pre-NPRM stage than public interest groups, and more than fifty times more recorded contacts with the EPA than state regulators.²²⁹ These striking disparities in participation on air toxic standards are reinforced by Professor Coglianese's study of significant hazardous waste rules promulgated by the EPA from 1988 to 1991.²³⁰ Based on more than forty interviews with the EPA and stakeholders involved in EPA rules, Coglianese concludes that "[i]n the rule development phase, industry groups tend to dominate because of the information they can provide to the agency staff as they write a rule. . . . Corporations and trade associations get involved in the development of nearly every significant EPA rule."²³¹

What develops from the administrative process during the development of the actual rule, then, is a form of information symbiosis between the agencies and the most knowledgeable and resourceful groups. The agency appreciates that the only way to get its rule through the process is to work closely with its fiercest allies early in the rulemaking. Indeed, the EPA's own training materials openly encourage these early contacts with its adversaries. "Negotiation and consultation with outside parties are an important

228. See, e.g., CORNELIUS M. KERWIN, RULEMAKING: HOW GOVERNMENT AGENCIES WRITE LAW AND MAKE POLICY *passim* (2003) (noting the possibility for important participatory opportunities in the development of the proposed rule); Scott R. Furlong & Cornelius M. Kerwin, *Interest Group Participation in Rulemaking: A Decade of Change*, 15 J. PUB. ADMIN. RES. & THEORY 353, 369 (2005) (same); West, *supra* note 183, at 70–72 (same).

229. See Wagner et al., *supra* note 37, at 22–23 (reporting that based on pre-NPRM contacts that the EPA did docket, there were—on average, per rulemaking—153 communications (including meetings, telephone conversations, and letters) with industry; 0.7 communications with public interest groups; and 9 communications with state and local regulators).

230. Coglianese, *supra* note 47, at 47–52.

231. *Id.* at 51–52. Professor Coglianese's dissertation is brimming with illustrative quotations. Among them is a quote from an EPA official who praised litigious trade groups for their diligence in assisting the EPA, even after suing the agency for the same rule that the official helped developed: The trade association "cooperate[d] with the agency, bend[ing] over backwards to help us in any way that we wanted. All we had to do was ask and they would do that. It was literally a pleasure working with those people." *Id.* at 132.

part of the rulemaking process at EPA [This contact] brings outside information and perspectives to the Agency's decisions[,] . . . builds support for the Agency's decisions[,] and increases the overall efficiency of EPA's decision making process."²³² Professor Coglianese quotes an EPA official who further underscores the importance of close relations with industry during the development of the proposed rule:

We try to bring them in as early as possible on what we are required to do and request their help very early on and usually this is appreciated because that way they have input as opposed to EPA unilaterally going out and looking at various textbooks and writing rules that are ridiculous because we don't fully understand what the hell we are regulating. So it works out better by working very closely with the people that we are going to regulate and we do this in various ways. We meet with them, we have industry-agency workgroups that will meet together.²³³

This enthusiasm for early and frequent stakeholder input is not lost on regulatory participants. Industry in particular appreciates that its best shot at having a significant influence is during the rule's formative stages. Legal counsel for industry participants advise them to "[g]et involved during the preproposal phase of an Agency rulemaking. That is when the regulation writers want reliable technical information . . . and are thus most receptive to comments from interested persons."²³⁴ Indeed, there are several accounts of industry not only commenting but also actually drafting the proposed rule as part of these pre-NPRM discussions.²³⁵

232. *Id.* at 32–33 (alterations in original) (citing EPA, FACT SHEET 12 (1992)).

233. *Id.* at 26.

234. Field & Robb, *supra* note 31, at 9; *see also supra* note 226.

235. *See* Field & Robb, *supra* note 31, at 52 (crediting one attorney with pointing out the advantages of providing draft language for the proposed rule and concluding that "whatever the Agency does not take out [of your draft rule] reflects your thinking and has your perspective"). As an official in a corporate office explained with respect to involvement with the EPA on a rule:

I led an effort—which took about 9 months—to develop using our internal design and operating practices for our [operations], to develop an actual regulation and a preamble and it wound up being a 300-page document with lots of technical data to submit to the agency before they even really started their regulatory process, as a way to influence their thinking on what it ought to look like. And we carefully tied it to the statutory mandate and documented all of the design standards and operating procedures that we used—why they were important, where they were used, what the benefits were—and put that in front of the agency well in advance of their process to influence how they went about it. It had a tremendous impact.

Coglianese, *supra* note 47, at 32 (alteration in original).

3. *The Third Challenge for Pluralistic Oversight: Imbalances in Participation in Expensive Public Processes.* In an idealized version of administrative rulemaking, the agency single-handedly prepares a proposal that provides a thoughtful, holistic approach to the problem.²³⁶ The proposed rule is simple, clear, and accessible, so that all affected parties can engage in the core issues. In keeping with the APA's aspirations, the proposal is then subjected to vigorous and diverse comments, leading to a final rule that is a bit more complex, intricate, and technical, but that generally does not deviate in material ways from the agency's initial proposal. Although interest groups in this ideal process might differ in the resources and information available to them, their disparities do not significantly advantage some groups over others, particularly because they all come to the proposal without extensive prior involvement.

But if the pre-NPRM process discussed in the previous Section is even partly accurate, then in practice the prospect of balanced engagement by a diverse group of stakeholders is unlikely. Much like a contract between elite parties, a number of proposed rules and perambulatory explanations may be extraordinarily detailed and even unfocused or meandering—well beyond what might be expected to truly attract public notice and comment.²³⁷ Because pre-NPRM discussions allow select parties to fill the proposal with multiple caveats, anticipatory exemptions, and other details that can expand the volume and technicality and reduce the coherence of the proposal, the proposed rule may be anything but accessible and concise at this stage. Indeed, because the agency is not required to filter or limit any of its discussion or even the text of its proposed rule, the agency is likely to err on the side of overreacting and overexplaining. With the threat of judicial review looming, the agency operates defensively, working overtime to anticipate all major issues

236. Cf. WESLEY A. MAGAT, ALAN J. KRUPNICK & WINSTON HARRINGTON, RULES IN THE MAKING: A STATISTICAL ANALYSIS OF REGULATORY AGENCY BEHAVIOR 31–38 (1986) (providing a flow chart and elaboration on this ideal (and possibly historic) approach to rulemaking).

237. As Professor Watts observes:

[A] notice of a final rule could be thought of as speaking *to interested parties* and *to the courts* in that it aims to justify the validity of that particular rule in terms sufficient to stave off or to withstand judicial challenge and perhaps also to win a broader public relations battle.

Kathryn A. Watts, *Proposing a Place for Politics in Arbitrary and Capricious Review*, 119 YALE L.J. 2, 25 (2009). For further discussion of many rules' excessive length and detail, see *supra* Part II.B.1.

in its proposed rule in an effort to stave off litigation and devastating material comments, without worrying about the barriers that its less-expert readers might encounter in understanding and evaluating the proposed rule.

In this prolix state, affected groups require greater resources to offer meaningful comments on the proposed rule, especially if they were not privy to much of the specialized information that went into the proposal.²³⁸ There have been no efforts to measure the resources needed to understand an average EPA proposed rule, but the literature offers a number of anecdotes suggesting that the barriers can be quite high.²³⁹ Indeed, a random sample of any of the EPA's technology-based standards should convince a skeptical reader of the near-unintelligibility of these rules, even without reading the more dense preambles the agency prepares to defend its rule.²⁴⁰ Reinforcing these general claims about a very high and likely excessive level of detail and technicality in many EPA rulemakings are some preliminary measures that reveal relatively long rules²⁴¹ and debates

238. Indeed, buried deep under technical assumptions and impenetrable draft rules could lurk significant concessions that occurred during pre-NPRM discussions. Other long passages may be a defensive maneuver by the agency first to anticipate detailed criticisms and then to respond to them. But an interest group that is not engaged in pre-NPRM discussions may find these cumulative passages quite time-consuming to decipher and understand, and often may decide after this investment that it is unable to assess the passages' significance for how public health might be affected. Certain adjustments or decisions—monitoring requirements that must be conducted annually rather than weekly, techniques for measuring emissions that involve larger margins of error than more expensive measurement techniques, pollution control equipment that does not function well at high temperatures—may impact pollution levels going into the air. But given the main source of litigation concern, these issues will be framed and addressed primarily to the agency's most fearsome opponent—industry.

239. See, e.g., JAMES Q. WILSON, *BUREAUCRACY: WHAT GOVERNMENT AGENCIES DO AND WHY THEY DO IT* 283 (1991) (citing as an example a huge record compiled for an OSHA standard that took the agency four years to process and that included 105,000 pages of testimony “in addition to uncounted pages of documents”); Carol M. Rose, *Rethinking Environmental Controls: Management Strategies for Common Resources*, 1991 *DUKE L.J.* 1, 1 (asking in despair: “How can we make sense of environmental law? Our legislators churn out great undigestible masses of statutes about the environment, which in turn are interpreted by mounds of regulations, all densely packed with bizarre terms and opaque acronyms.”); Coglianese, *supra* note 47, at 34–35 n.39 (quoting an EPA staff member discussing how one rule, for example, involved 481 commenters, required “800 hours from one contractor alone in one week” to begin to assemble and process the comments, and demanded sixteen hundred hours of EPA staff time in one week alone to process the comments before the final rule was promulgated).

240. See, e.g., 40 C.F.R. pt. 63 (2009) (technology-based standards for hazardous air pollutants).

241. See Wagner et al., *supra* note 37, at 18 (finding an average of thirty-nine pages per final rule, with some rules reaching above two hundred pages).

over dozens of significant issues for each rule in at least one set of pollution control standards.²⁴² Thus, although the EPA's rules are likely to vary in their complexity, the fact that they are generally quite complicated and technical seems uncontested.

More revealing of actual barriers to participation in public health rules are early empirical studies that document significant imbalances between regulated parties and public interest groups during the comment process. Although these studies do not provide any diagnosis for this imbalance, they are at least consistent with the consequences expected to flow from information capture. For example, in the previously mentioned study on hazardous air pollutant rules, industry comments (by industry players as well as industrial associations) accounted for more than 76 percent of all comments received by the EPA, with extensive industry involvement in 100 percent of the rulemakings.²⁴³ By contrast, public interest representatives, including state and local regulators as well as nonprofits, participated in less than half of the rulemakings, with comments across all rules averaging 5 percent of total comments.²⁴⁴ In his study of RCRA rules, Professor Coglianese found a similar imbalance, with businesses participating in 96 percent and national environmental groups participating in 44 percent of rules.²⁴⁵ He also found that “[n]early 60 percent of all the participants in RCRA rulemakings . . . came from industry; only 4 percent from the environmental community.”²⁴⁶ These EPA-focused studies are complemented by Professors Jason Webb Yackee and Susan Webb Yackee's study of forty low-salience rules from four different agencies.²⁴⁷ They found that business interests submitted 57 percent of comments, whereas nongovernmental organizations submitted 22 percent of comments, 6 percent of which came from public interest groups.²⁴⁸ The study concludes that business interests dominate the

242. *See id.* at 20 tbl.6 (finding an average of twenty-seven issues, and a maximum of 121 issues, raised per proposed rule in a study of the EPA's HAPs rulemakings).

243. *Id.* at 17.

244. *Id.*

245. *See Coglianese, supra* note 47, at 50 tbl.2-2.

246. *Id.* at 48; *see also id.* at 48 tbl.2-1 (noting that 17.3 percent of participants came from state and local governments and 10.5 percent came from the federal government; the total number of participants was 1607).

247. *See Jason Webb Yackee & Susan Webb Yackee, A Bias Towards Business? Assessing Interest Group Influence on the U.S. Bureaucracy*, 68 J. POL. 128 (2006).

248. *Id.* at 133.

comment process in these low-salience rulemakings, but the authors do not provide measures of the rules' technicality. Hence, it is not possible to determine how their results intersect with the information capture hypothesis.

At the same time that the costs required of interest groups rise, the currency of greatest value to public interest groups—positive credit for success that is then advertised in the media and donor circles—drops as the issues become more mired in details and technicalities. In the air toxic regulation study previously mentioned, media attention on the substance of EPA rulemakings was extremely limited, with less than 15 percent of the rules covered at least once in more than one hundred major newspapers.²⁴⁹ In this setting, the ratio of costs to benefits of public interest participation may fall more sharply relative to industry because costs increase and benefits drop once information loading reaches the point of diminishing returns. These dropping benefits to engagement might also explain why public interest groups, to the extent that they do engage, appear to reserve their fire power for deadline suits and litigation at the very end of a rulemaking, when the possibility for positive media attention is the highest.²⁵⁰

Equally important in assessing the strength of pluralistic oversight is an assessment of the actual influence of commenters. One can at least hold out some hope that parties that dominate the information flow may not necessarily enjoy similar levels of influence in affecting the actual substance of the final rule. But based on several snippets of evidence, it appears that voluminous filings of technical comments do translate relatively directly into influence over the final rule. First, if each detailed and well-supported comment raises a litigation risk, then the agency can be expected to make changes that are roughly proportional to the total number of comments, rather than favoring the comments of an underrepresented constituency.²⁵¹ In his case study of OSHA, for example, Professor Schmidt found that litigation-backed comments were the most influential precisely because they posed immediate risks to the fate of the rule.²⁵² Second, and in this same vein, industry comments are likely to be more factually and technically oriented given industry's specialized

249. See Wagner et al., *supra* note 37, at 30.

250. See Coglianese, *supra* note 47, at 28; Wagner et al., *supra* note 37, at 27–30.

251. See *supra* notes 148–58 and accompanying text.

252. See Schmidt, *supra* note 173, at 80, 82, 86–87.

knowledge and attentiveness to compliance-related details. These technical facts constitute an agency's soft spot in litigation, and agencies are purported to be particularly amenable to making changes in their final rules based on comments that are technical in nature.²⁵³ Finally, the preliminary empirical evidence that bears on commenter influence reveals that industry continues to dominate the changes made between publication of the proposed and final rule. Both the Yackee and Yackee study and the preliminary study on hazardous air pollutants traced influence by statistically linking comments with changes in the final rule.²⁵⁴ The studies found that the number of comments was the best predictor of influence; industry dominated the comment process as well as the changes the agency made in the final rule. In the hazardous air pollutant study, for example, agencies made an average of more than ten changes weakening a rule, presumably in response to industry demands, as compared with an average of two changes that strengthened a rule.²⁵⁵

4. *Reasons for Comfort? Possible Sources of Counterpressure Against Pluralistic Losses.* Even if the pressures for information capture are in fact strong and unrelenting, there are other institutional mechanisms that would seem, in theory, to help agencies resist the pressure. Such counterpressure could occur, for example, through the courts' imposition of vigorous information filters on participants or by offsetting interest group imbalances with some form of political or staff pushback. This Section considers these additional institutional interventions. Ultimately, however, none

253. See, e.g., Field & Robb, *supra* note 31, at 10 (noting that industry counsel agree that “[t]he arguments that stand the greatest chance of being listened to by the Agency are those that address technical aspects of a proposed rule rather than the legal basis of that rule”); see also *id.* at 50. Moreover, if industry has already had extensive discussions with the agency to convince it to consider its material changes during the pre-NPRM, its formal comments are likely to be aimed primarily at chipping away at the rule on smaller details rather than radically reconfiguring the proposal. By contrast, the public interest groups' primary concerns and comments may take on some basic framing decisions fundamental to the development of the rule. To the extent that these groups' changes tend in this more “material” direction, they are more likely to receive a chilly reception from the agency because they technically require the agency to promulgate a supplemental or second proposed rule, which involves an additional notice-and-comment process. In terms of the time involved, it may be quicker to reject these groups' significant comments and risk being sued than to accept their changes and trigger notice and comment all over again.

254. See Yackee & Yackee, *supra* note 247, at 135; Wagner et al., *supra* note 37, at 7–8.

255. Wagner et al., *supra* note 37, at 20 tbl.6.

appear capable of counteracting information capture, at least not in a significant way.

a. Courts as Filters. The courts create many of the significant incentives for information capture through their interpretation of the APA, but in the narrow context of individual cases, they are actually quite adept at forcing powerful information filters on participants.²⁵⁶ Through page and brief limitations, litigation helps focus and narrow the issues in dispute.²⁵⁷ Adversarial disagreements also tend to limit and sharpen the issues and cull out peripheral or weak arguments. Finally, there are generally far fewer information-related imbalances at the appellate stage because factual disagreements are generally limited to the finite administrative record.²⁵⁸ Thus, though appellate cases still can be unwieldy, the judicial process provides incentives for parties to process the information before they communicate it.²⁵⁹

The effectiveness of the courts as information filters, however, is only as good as the cases that come to them, and this proves to be a significant limitation in several respects. First, courts will not preside over *all* cases in which information capture has taken hold, but only those challenges that are brought to them for adjudication. In some cases, public interest groups may select captured rulemakings specifically to highlight for the court the imbalance in the agency's analysis. The existing empirical evidence suggests, however, that a number of EPA rules may not be subjected to judicial scrutiny. Professor Coglianese's statistics indicate that of the EPA's significant hazardous waste regulations promulgated over a three-year period, only about a quarter of the rules were actually briefed in court.²⁶⁰ More than half were not challenged, and about half of the remaining cases settled before oral argument.²⁶¹ Interestingly, some of these cases may have settled precisely because the parties did not want to invest the time or energy (or litigation risk) in processing their claims for the courts. Professor Coglianese found in his study that “[o]ne

256. Cf. Smith, *supra* note 21, at 1125 (observing how formal forums can involve more extensive filtering for the participants).

257. See *supra* note 26.

258. See, e.g., Edison Elec. Inst. v. OSHA, 849 F.2d 611, 617–18 (D.C. Cir. 1988).

259. But see WILSON, *supra* note 239, at 284 (observing that court access is expensive).

260. See *supra* note 197.

261. See *supra* note 197.

reason groups select or settle issues is that the court imposes page limits on briefs and a time limit on oral argument.²⁶²

Adding to the courts' limitations is the fact that settlements that occur on the courthouse steps may make information capture worse, rather than better. As discussed earlier, the litigants in these judicial settlements (which may be disproportionately the same parties that dominated earlier phases of the rulemaking)²⁶³ are able to take one last bite out of the rulemaking through confidential settlement negotiations.²⁶⁴ Even more troubling, in some cases, these post-rule settlement negotiations may undo some of the pluralistic gains made earlier in the process. Professor Coglianese, for example, observed that

[i]n the wood preserving rule, the 267 individuals and groups filing comments on the rule narrowed down to three groups in court. Greenpeace and the Environmental Defense Fund were extremely active in the rulemaking, but did not enter the litigation. As a result, positions these environmental groups successfully advanced in the rulemaking were later directly undercut in the litigation process.²⁶⁵

A second and related limitation to the courts' filtering effectiveness is their dependence on litigants to raise the issues in need of vetting. Specifically, if industry is the primary litigant, then only industry's complaints will be aired in court; the possibility that the rule is not protective enough will not be presented to the court for resolution. The resulting narrowing of the issues raised in litigation will likely mirror the imbalance in interest group representation occurring at earlier phases of the rulemaking. As noted previously, public interest groups appear to file comments on about half of EPA rulemakings (whereas industry files comments on nearly all of them).²⁶⁶ As a result, environmental groups are only able to file suit

262. Coglianese, *supra* note 47, at 114.

263. See *infra* note 269 and accompanying text.

264. Also as discussed, the resulting settlements can lead to significant changes that affect, for example, how the agency will interpret or enforce the rule; but these changes may not be subject to notice and comment and may not even be shared openly with the public. See *supra* notes 195–96 and accompanying text; cf. Field & Robb, *supra* note 31, at 52–53 (stressing the advantages of negotiating with the agency rather than litigating against it, and how such negotiations further allow other issues to be addressed, even if they were not part of the original legal challenge); Schmidt, *supra* note 173, at 79 (discussing OSHA's settlement with one party, which involved altering its enforcement guidance).

265. Coglianese, *supra* note 47, at 107.

266. See *supra* text accompanying notes 243–46.

for half of all rulemakings because they have not exhausted their remedies on the other half. Additionally, evidence reveals that the delay common to litigation is highly attractive to industry, but constitutes a negative feature for environmental groups because it delays pollution regulation.²⁶⁷ Thus, even when they have a claim and can file suit, the very different payoffs may make environmental groups less inclined to file suit against the substance of EPA rules.²⁶⁸ The available evidence on challenges to the EPA supports these concerns: industry players challenge more EPA rules than environmental groups.²⁶⁹

267. For example, Professors Owen and Braeutigam suggest in their “[s]trategies for [e]stablished [f]irms and [i]ndustries” to game the APA:

The delay which can be purchased by litigation offers an opportunity to undertake other measures to reduce or eliminate the costs of an eventual adverse decision. These measures include strategic innovation, legislative proposals, and lobbying activity. If the administrative process goes on long enough, it is even possible to ask for a new hearing on the grounds that new and more accurate information may be available. The agency usually cannot resist the effort to delay through exhaustion of process because this would be grounds for reversal on appeal to the courts.

OWEN & BRAEUTIGAM, *supra* note 59, at 4–5; *see also* Sidney A. Shapiro & Thomas O. McGarity, *Not So Paradoxical: The Rationale for Technology-Based Regulation*, 1991 DUKE L.J. 729, 737–38 (observing that “[b]ecause judicial review ‘delay[s] the implementation of OSHA standards by an average of two years,’ a company or trade association could save its industry \$320,000 by filing an appeal, assuming an eight percent annual interest rate. . . . [Thus a trade] association could afford legal fees of up to \$640 an hour and still save its members money compared to the costs of immediate compliance with the OSHA standard” (second alteration in original) (footnote omitted)).

By contrast, environmental groups often see delay as a window during which health is not sufficiently protected. *See, e.g.*, HREBENAR, *supra* note 40, at 262 (observing that “[t]ime delays often benefit the corporate interests while creating a disadvantage for consumer groups” and linking this not only to regulatory consequences but to the costs of engaging in the process). Though the EPA’s standards may be a disappointment, further delaying their implementation could be worse. *See, e.g.*, Stewart, *supra* note 6, at 1772 (“Increased procedural formalities [like judicial review] may work to the disadvantage of public interest groups by exhausting their limited resources and providing organized interests a basis for delaying agency enforcement actions.”); *cf.* MASHAW, *supra* note 114, at 174 (noting that the timing of review and associated compliance costs affect a party’s stake in challenging a rule in court).

268. For the same reasons, environmental groups will be more inclined to sue the EPA for missing the statutory deadlines set for issuing the rule.

269. *See, e.g.*, Lettie McSpadden Wenner, *The Reagan Era in Environmental Regulation*, in CONFLICT RESOLUTION AND PUBLIC POLICY 41, 48 (Miriam K. Mills ed., 1990) (reporting based on an empirical study of appellate litigation from 1970 to 1985 that “[i]ndustry exceeded environmental groups’ complaints against government actions at the appellate level as early as 1976, and this was reversed only once, in 1983, when industry’s inputs fell off,” and positing that scarce resources of the environmental groups may help explain why these groups were not more vigorous in challenging the Reagan EPA in court); Yackee & Yackee, *supra* note 247, at 133. Professor Coglianese’s study, which considers hazardous waste rules closest to those likely to be subject to filter failure, reports that among the thirteen of twenty-eight significant rules challenged in court, 101 total petitions were filed; “91 percent of these 65 groups were

b. Offsetting Imbalance in Interest Group Participation with Civic-Minded Government Employees. One correction that could be quite effective in counteracting imbalances in participation (though it would not stem rising information costs) is the civic commitment of agency staff. Agency staffers are not automatons that respond unthinkingly to gluts of information that threaten to undermine their regulatory mission. Committed EPA staff is likely to be an extremely important force in pushing back against unilateral pressure from one group, particularly industry. In his excellent study, Professor Croley notes—with ample evidence—the important role of agency leadership and staff in keeping public beneficiaries in mind.²⁷⁰

In practice, however, this professional ballast might not be sufficient to eradicate, or even significantly reduce, the information capture phenomenon. First, given the incentives created by the structure of administrative law itself, particularly those created through judicial review, civic-minded staff will face an uphill legal battle to surmount all of the one-sided pressures described in this Article. Preliminary evidence of changes made to final rules based on skewed industry participation further increases concerns that the agency may be capitulating to a number of industry demands—though the importance of these numerous concessions remains to be seen.²⁷¹ Even assuming that the legal obstacles are not overpowering, however, this model of administrative law presents a very different mechanism for accountability than the process outlined in the law books. For example, if agency staff are the primary means for promoting the public interest (and pluralistic mechanisms of oversight are effectively abandoned), the hiring of staff must be done in a transparent and explicit way that consistently favors those with views like those working in public interest groups. Administrative law will also have to come to terms with the notion of reduced accountability and transparency when decisionmaking authority is delegated wholesale to a trustworthy professional workforce. None of this is to

corporations or trade associations, while only 8 percent were environmental organizations.” Coglianesse, *supra* note 47, at 70.

270. CROLEY, *supra* note 39, at 159 (positing that “[i]t is plausible that agency regulators are motivated to do so as a result of their own commitments to the common good, which might after all account for why they became regulators in the first place”); *id.* at 282 (concluding from his case studies how the APA processes helped agencies inoculate rules from interest group pressures and allowed “public-interested administrators . . . to pursue regulatory goals they believed advanced social welfare in the face of substantial opposition”).

271. See *supra* notes 251–55 and accompanying text.

suggest that the agency may not help buffer against information capture, but it does suggest that this more informal role played by agency staff needs more systematic confirmation and may need additional process checks before information capture's potential significance can be dismissed.

c. Offsetting Pluralistic Imbalance with Civic-Minded White House Interventions. A number of legislative and executive innovations, such as cost-benefit analysis, would seem, in the abstract, to counteract filter failure head-on by forcing agencies to analyze the implications of their rules and share these analyses with the public.²⁷² Such requirements endeavor to provide onlookers with even more accessible and digestible snapshots of the costs and benefits of regulation, as well as the implications of regulation for irreversible environmental commitments and for vulnerable groups, like small businesses.²⁷³

These analytical requirements are quite appealing from an information-processing perspective, but they have not lived up to their potential in practice and seem to suffer from filter failure as well.²⁷⁴ Retrospective studies of the National Environmental Policy

272. Some of the more significant information-generation requirements imposed on the agencies that can apply during informal rulemaking include: the National Environmental Policy Act of 1969, 42 U.S.C. §§ 4321–70f (2006), which assesses environmental impacts; the Paperwork Reduction Act, 44 U.S.C. §§ 3501–21 (2006), which requires clearance procedures for federal forms, recordkeeping, and amendments pertaining to electronic information; the Regulatory Flexibility Act, 5 U.S.C. §§ 601–12 (2006), which requires comprehensive reviews of regulatory activities and consideration of the impacts of rules on small businesses; and Executive Order 12,866, 3 C.F.R. 638 (1994), *reprinted as amended in* 5 U.S.C. § 601 (2006), which requires a regulatory impact assessment (otherwise known as a cost-benefit analysis) of influential rules and that these rules be cleared through the Office of Management and Budget. Individual statutes may impose still more information-intensive demands, such as allowing parties the right of cross-examination. *See generally* 1 PIERCE, *supra* note 9, §§ 7.7, 7.11.

273. Winston Harrington, Lisa Heinzerling & Richard D. Morgenstern, *Controversies Surrounding Regulatory Impact Analysis*, in REFORMING REGULATORY IMPACT ANALYSIS, *supra* note 82, at 10, 12–13 (touting these advantages of the RIA process). At the same time, these salience-raising analyses provide a door through which White House offices can enter to review the agency's preferred course of action. In theory, this form of political oversight offers the opportunity for push-back on information capture.

274. Some and perhaps most of this failure may be attributed to how these provisions are designed. For example, virtually all of the information and analysis requirements are imposed on agencies without protecting them from candid disclosures or litigation-generating admissions against interest. These added analyses are also often prepared near the end of the process, when the decision is close to final. Harrington et al., *supra* note 82, at 224–25. As a result, the reports serve in practice only to increase the agency's vulnerability to lawsuits and unwelcome political pressure if the agency slips and includes, in writing, some admissions against interest. Not

Act (NEPA) and the regulatory impact assessment (RIA) process consistently find that the agency's analyses tend to be very lengthy (reaching into the hundreds or thousands of pages), highly technical, and so laden with assumptions that the summary tables provide an unreliable overview of the contents of the larger document.²⁷⁵ For example, in its comprehensive study of the agency's compliance with NEPA, the Council on Environmental Quality concluded that rather than providing a candid assessment of the project, the agencies generally turned the environmental impact statement into a "litigation-proof" document that did not adequately raise or consider alternatives or engage with the underlying facts in a rigorous way.²⁷⁶

Even if these centralized analyses cannot completely counteract filter failure, they still might provide valuable mechanisms for the White House or other high-level political officials to gain purchase on regulatory issues and intervene more directly in ways that offset participatory imbalances arising from information capture.²⁷⁷ Much like the model for civic-minded staff within the agency, this political ballast—occurring through the White House and the Office of Management and Budget (OMB)—would in theory push back against one-sided pressure to keep these rules on a level playing field. Most would prefer this political counterpressure to take place in the light rather than outside public oversight, as is currently the case.²⁷⁸ But the

surprisingly, agency general counsel and other high level officials appear to play a very heavy hand in drafting the document, just as they do for proposed and final rules, and sometimes limit the analysis, potentially substantially. *Id.* at 221–22 (recounting how the agency may consider only one option instead of comparing it to a possibly more efficient alternative). The ability of these analytical documents to penetrate the informational fog appears well out of reach, at least currently.

275. *Id.* at 226 (observing, based on case studies, that "RIAs have become huge, dense documents that are almost impenetrable to all but those with training in the relevant technical fields . . . [and that] [e]ven to the well-trained eye, RIAs are often opaque").

276. COUNCIL ON ENVTL. QUALITY, *THE NATIONAL ENVIRONMENTAL POLICY ACT: A STUDY OF ITS EFFECTIVENESS AFTER TWENTY-FIVE YEARS*, at iii (1997).

277. See, e.g., John D. Graham, *Saving Law Through Administrative Law and Economics*, 157 U. PA. L. REV. 395, 473–74 (2008) (describing White House deliberations over features of EPA rules that were not clear from the RIAs, but related to the costs and benefits of the regulation).

278. Lisa Schultz Bressman & Michael P. Vandenbergh, *Inside the Administrative State: A Critical Look at the Practice of Presidential Control*, 105 MICH. L. REV. 47, 78, 86 (2006) (noting that "97% of EPA respondents stated that White House involvement was either not visible . . . or only somewhat visible to the public" and that a majority of EPA respondents believe that the White House is more susceptible to faction capture than the EPA); see also Sally Katzen, Correspondence, *A Reality Check on an Empirical Study: Comments on "Inside the Administrative State,"* 105 MICH. L. REV. 1497, 1502–03 (2007) (conceding the lack of

fact that it occurs at all may be chalked up as a victory over the skewed results that might otherwise arise from information capture.

Current evidence of OMB's involvement in EPA rulemakings suggests that rather than taking the side of environmental groups, OMB far more often sides with industry. One of the primary justifications for stronger White House and OMB involvement is to counteract the perceived ideological bent of mission-oriented bureaucrats.²⁷⁹ Former OMB appointees openly concede that they regard balancing out the "laser"-like focus of the environment-minded EPA as one of their more important roles.²⁸⁰ More recent studies of OMB in particular confirm its generally anti-environmental bent.²⁸¹ Thus, if information capture tends to cause a skew toward business, existing studies provide no basis for thinking that White House and OMB review helps protect against it.²⁸²

transparency but arguing that the results of White House involvement provided greater political accountability, a point discussed later).

279. See, e.g., Bagley & Revesz, *supra* note 40, at 1261–62 (discussing how OMB review is an antiregulatory force that descended from the Reagan-era assumption that agencies will overregulate due to capture by groups like prohealth and prosafety constituencies).

280. Katzen, *supra* note 278, at 1505 (observing how the EPA "focus[es] like a laser" on protecting the environment, whereas the Office of Information and Regulatory Affairs (OIRA) takes "a broader view and consider[s] how, for example, an environmental proposal will affect energy resources, tax revenues, health policy, etc.>").

281. In their study of top EPA officials' views of OIRA during the Bush I and Clinton administrations, Professors Bressman and Vandenberg report that the strong majority (70 percent) reported that the "White House readily sought changes that would reduce burdens on regulated entities, and veered from those that would increase such burdens." Bressman & Vandenberg, *supra* note 278, at 87. Professor Croley made similar, although not quite as strong, observations about OIRA's tilt during the White House review process: 56 percent of the meetings OIRA conducted to discuss rulemakings were exclusively with industry, as compared with 10 percent held exclusively with public interest groups. Steven Croley, *White House Review of Agency Rulemaking: An Empirical Investigation*, 70 U. CHI. L. REV. 821, 853, 871 (2003). Finally, in a study by the Government Accountability Office, about two-thirds of the rules that OIRA "significantly affected" and for which comments were available involved reinforcing the views of industry. U.S. GEN. ACCOUNTING OFFICE, NO. GAO-03-929, RULEMAKING: OMB'S ROLE IN REVIEWS OF AGENCIES' DRAFT RULES AND THE TRANSPARENCY OF THOSE REVIEWS 11 (2003), available at <http://www.gao.gov/new.items/d03929.pdf>.

282. To the extent that these centralized review processes could ultimately make matters worse with regard to information filtering, the good news is that they only apply to some of the most significant rules, which are likely to be the most salient. But the glass is more likely half empty. Significant rules seem to be those most likely to escape the most entrenched forms of information capture. See *supra* notes 213–15 and accompanying text. That these salient rules actually escape information capture only to be placed, because of their significance, into a more highly politicized setting—where they are at real risk of old-fashioned political capture—presents a bleak picture of administrative process.

5. *Summary.* In the process just described, as costs mount at each successive stage of a rulemaking, the participants drop out. The resulting information capture causes adversarial and pluralistic processes to break down due to the substantial demands on the time and energy of interest groups that must keep up with the growing issues and record. Once information costs are factored into the evaluation of administrative processes, then, these processes may not be neutral after all.²⁸³ In the end, the result looks much the same as the type of agency capture that initially motivated these oversight processes in the beginning.

B. Other Adverse Consequences

1. *Constrained Decisionmaking that Leads to Satisficing Rather than Comprehensive Regulatory Decisions.* Professor James Q. Wilson writes that “government management tends to be driven by the *constraints* on the organization, not the *tasks* of the organization.”²⁸⁴ The possibility that the agency may spend more time with the *constraint* of organizing, processing, and responding to information than actually synthesizing it into a coherent regulatory policy seems more than a hypothetical worry. The mounds of highly

283. This is the fundamental point at which this Article departs from Professor Croley’s analysis. See CROLEY, *supra* note 39, at 74–75 (arguing that regulatory agencies may avoid bias from information capture because many sources of information are available). Once information costs are considered, the processes are not neutral. Information costs do provide a way for more powerful interests to outcompete less powerful interest groups. Indeed, these advantages occur because of administrative processes and rules, not in spite of them. More specifically, Professor Croley seems to assume that access in most cases will be both a necessary and a sufficient condition for participation. This Article argues that it may be a necessary condition, but it is not sufficient in most cases. For example, he argues that

[b]ecause the procedures through which agencies identify and evaluate regulatory alternatives provide opportunities for a wide variety of interests to supply administrators with facts and arguments, and similarly to question the facts and arguments provided by competing interest or generated by agencies themselves, regulatory decisionmaking procedures provide significant protection against informational capture.

Id. at 75. But if the information involved is extremely voluminous and technical, then access is not “free” in practice and information begins to impede the extent to which parties can participate. This Article’s analysis also takes issue with Professor Croley’s argument that administrative processes provide agencies with the discretion to consider information comprehensively. See, e.g., *id.* (“[A]gencies are equipped [through administrative procedures] to assess information about regulatory ends and means, and in particular to do so with informational independence from those interests with the biggest stake in regulatory outcomes.”). Instead, this Article argues that administrative processes tend to tether the agency to the informational priorities of the dominant stakeholders.

284. WILSON, *supra* note 239, at 115.

technical information streaming in, coupled with a judicially enforced requirement that the agency must “consider” all of it, puts a strain on the agency’s ability to make coherent decisions. The most obvious effect of this strain is to divert some of the agency’s limited attention away from producing coherent regulatory policies and toward information management.²⁸⁵ Indeed, processing this incoming information can become so central to the agency’s daily work that organizing and processing information could even surpass the energies dedicated to the agency’s mission of producing creative, effective public-benefitting regulations.

Agencies, wisely, have tried to delegate much of the burden of information management to contractors, but separating information management from decisionmaking is not always easy in these settings.²⁸⁶ For example, contractors are often assigned the job of summarizing public comments and preparing the agency’s comprehensive response to them.²⁸⁷ They are also heavily involved in the technical analysis that precedes development of the proposed rule.²⁸⁸ Both of these responsibilities place the contractors in key roles of regulation development. As a result of contractors’ intimate involvement, there is growing concern that contractors, rather than the EPA, may be left making key policy decisions simply by virtue of fulfilling their contracts. Professor Paul Verkuil, for example, worries that because of this extensive contractor involvement in rulemakings, “[r]ationality review by the agency may be fast becoming a misnomer.”²⁸⁹ An increasingly heavy reliance on contractors to process large amounts of the information relevant to a regulation may also lead the EPA to “look ‘less for technical geniuses’ [in hiring staff] and more for generalists who can oversee and communicate with

285. See, e.g., SIMON, *supra* note 19, at 242 (“[Many] systems were not designed to conserve the critical scarce resource—the attention of managers—and they tended to ignore the fact that the information most important to top managers comes mainly from external sources and not from the internal records that were immediately accessible for mechanized processing.”).

286. See, e.g., Paul R. Verkuil, *The Wait Is Over: Chevron as the Stealth Vermont Yankee II*, 75 GEO. WASH. L. REV. 921, 928 (2007) (“Agency officials, overwhelmed by a workload produced in part by perceived views of hard-look review requirements, are increasingly delegating the rationality assignment to private contractors and signing off on the results.”).

287. *Id.*

288. See, e.g., MAGAT ET AL., *supra* note 236, at 31–38 (describing the role of contractor analyses and reports in the rulemaking process).

289. Verkuil, *supra* note 286, at 929.

technical consultants. This has affected morale, as EPA technical staff at times resent not being able to use their expertise.”²⁹⁰

Filter failure and the resulting risk of information capture in administrative process not only divert agency attention away from the central task of policymaking but also risk allowing the participants to control the regulatory agenda. Incremental muddling through in response to interest group input—or satisficing—will replace comprehensive problem solving.²⁹¹ This is exacerbated by the fact that under the current structure of notice and comment, “private parties can be relied upon to tell the agency what it is doing wrong [in specific rulemakings], but not how it might improve.”²⁹² In such a system, the agency is given little or no credit for imaginative problem solving.

In fact, a rule seems more likely to survive judicial review if the agency is particularly vigilant about responding to the priorities and issues its adversaries raise, even if it means forgoing the development of its own conception of a more holistic regulation. This judicially imposed demand puts the agency at the mercy of its adversaries and cedes to them some measure of control over the regulatory blueprint. One group of commentators concludes that, based on these process-based incentives, “it seems best to regard the regulatory agency as an endogenous force whose behavior can be strategically manipulated by the firms it regulates.”²⁹³

The most significant problem with satisficing as a way to develop regulatory policy, however, is the possibility that the groups that constrain the agency in these ways will not represent a cross section of the affected interests but instead will be badly skewed or even one-sided.²⁹⁴ In her study of the effects of judicial review on the EPA, Professor O’Leary concludes that “[m]atters suitable for litigation are

290. O’Leary, *supra* note 156, at 565.

291. *See, e.g.,* WILSON, *supra* note 239, at 283 (expressing concern and quoting others with the concern that the threat of judicial review will cause agencies to resist change or take risks on policies, “especially those that embody novel ideas or approaches”).

292. Rubin, *supra* note 119, at 103; *see also id.* at 114 (arguing that “policy formation concerns a much less strict conception of notice, grounded in considerations of optimal information flow, not fairness to individuals”).

293. OWEN & BRAEUTIGAM, *supra* note 59, at 9.

294. Judge Garland suggests this worry in passing, but with respect only to economic regulation. With respect to economic regulation, his concern is apparently that incumbents will engage the agency and that future beneficiaries will not be represented in judicial review or interest representation. *See* Merrick B. Garland, *Deregulation and Judicial Review*, 98 HARV. L. REV. 505, 591 (1985).

the ‘squeaky wheels that get the grease,’ while other important environmental problems fall by the wayside.’²⁹⁵ Squeaky wheels drive the formulation and solutions to the regulatory problem at hand, thus narrowing the conception and analysis as well as limiting the range of best policy responses.²⁹⁶ And the agency’s legally based preoccupation with these squeaky wheels may be badly out of line with the public interest, the aggregate views of all affected parties, and the original goal of the statute. As a result, a “system predicated on building consensus and refracting interests may prove painfully incapable of policymaking that transcends particularistic demands.”²⁹⁷

If administrative incentives do cause the agency to aim for a proposal that withstands the criticisms of litigious interest groups rather than one that provides comprehensive and responsible regulation, then the ideal of agencies has been significantly compromised.²⁹⁸ The solution lies not in providing more process and judicial review, but elsewhere.

2. *Strategic Uses of Information Capture that Pervert Open Government Processes.* Information capture represents the dark side of a transparent, equal, and open system of government: it enables participants to legally undercut one another and manipulate the agency with elaborate information-based strategies.²⁹⁹ Principles for open government can even exacerbate basic inequities among interest groups with regard to the resources available to participate, at least in some settings. As Professor Mashaw intuits, “if interest group theory

295. O’Leary, *supra* note 156, at 562.

296. Professor Stewart worried—even in the early years of the interest representation model—that “[j]udicialization of agency procedures and the expansion of participation rights may . . . aggravate the tendency for the agency to assume a passive role, focusing on the unique character of each controversy in order to reach an ad hoc accommodation of the particular constellation of interests presented.” Stewart, *supra* note 6, at 1773 (footnote omitted). The possibility of these ad hoc, unprincipled decisions arising from interest representation seemed to be Professor Stewart’s largest concern as well, though he gestured to the added possibility that ad hoc analysis also might not take into account all affected interests. *Id.* at 1789.

297. BOSSO, *supra* note 200, at 255.

298. Professor Schiller recounts how in the New Deal, agencies were supposed to serve “as a counterweight to the incredible power wielded by large corporations. . . . The administrative state equalized the playing field by placing the government on the side of the people rather than having it simply act as a neutral ‘umpire’ in a dispute between two unequal parties.” Schiller, *supra* note 29, at 429; see also MELNICK, *supra* note 149, at 76–80, 129–35, 157–62, 261–69 (discussing cases in which courts emphasized that the agency role was to protect public health and the environment).

299. Cf. CROLEY, *supra* note 39, at 305 (touting how APA processes stave off rent-seekers and keep regulatory outcomes more public benefitting).

works even somewhat similarly to what the public choice fraternity believes, transparency is a double-edged sword.”³⁰⁰

Indeed, the abuse of transparency and open government are well known by regulatory insiders. More than thirty years ago, Professors Bruce Owen and Ronald Braeutigam underscored how stakeholders’ “ability to control the flow of information to the regulatory agency is a crucial element in affecting decisions.”³⁰¹ Based on this power, they observe how these stakeholders can make available “carefully selected facts,” withhold others, and if delay is useful, “flood the agency with more information than it can absorb.”³⁰² When the agency seeks a particularly damaging piece of information that cannot be withheld legally, the interest group’s “best tactic is to bury it in a mountain of irrelevant material” or provide it but simultaneously “deny its reliability and to commence a study to acquire more reliable data.”³⁰³

Published advice by legal counsel to industry betray similar, albeit less candid strategies to use information strategically during the rulemaking process. One interviewee in Professor Coglianese’s study—a corporate counsel—provided a succinct summary of these methods: “We will try to build a record that’s persuasive . . . to sort of overwhelm the agency and create for them the impression that the world out there wants them to do something else.”³⁰⁴ Another group of industry attorneys observed that the EPA’s aversion to litigation was often exploited: “many people may file suit [against the EPA] just to ‘get a seat at the negotiating table.’”³⁰⁵

Good government reforms can also be used as Trojan horses to surreptitiously introduce new strategic tools for controlling regulatory processes through information capture. For example, the tobacco

300. MASHAW, *supra* note 114, at 190.

301. OWEN & BRAEUTIGAM, *supra* note 59, at 4.

302. *Id.*

303. *Id.* These techniques can also be deployed in more adversarial settings to overcome the opposition’s efforts. For example, “[i]f another party has supplied damaging information, it is important to supply contrary information in as technical a form as possible so that a hearing is necessary to settle the issues of ‘fact.’” *Id.* The techniques even advise regulated parties to deploy decentralized information systems so that officials can be selected who can testify truthfully on what they know, but be carefully protected from other conflicting or damaging sources of information. *Id.*

304. Coglianese, *supra* note 47, at 35–36.

305. Field & Robb, *supra* note 31, at 53.

lobby was the architect of both the Data Access³⁰⁶ and the Data Quality Acts,³⁰⁷ which Congress passed as appropriation riders about a decade ago.³⁰⁸ Both acts were purportedly passed to improve the scientific integrity of regulatory decisions. Yet, as their sponsorship might suggest, these provisions were motivated by more than tobacco's selfless effort to get government running on the right scientific track. The Data Access Act, for example, allows any party to access the data from any federally funded study that forms the basis for regulation; but private research that informs regulatory requirements (most of which is produced by regulated parties) is unaffected and remains out of public reach.³⁰⁹ A companion appropriations rider passed one year later, the Data Quality Act, allows any interested party to file an unlimited number of complaints (and appeals) of unlimited size against an agency alleging that some piece of information used at some point in the regulatory process was unreliable.³¹⁰ The provision includes no sanctions or costs for abusive filings. In the case of the Data Quality Act, however, the agencies got the last laugh. The courts and Congress declined to provide judicial review of the complaint process,³¹¹ and at the same time, industry use of the Act was put under the spotlight because of concerns about abuse.³¹² As a result, and much to the disappointment of its proponents, the Data Quality Act falls short of providing a judicially enforced mechanism for launching additional, information-based challenges to agency rulemakings.

306. Omnibus Consolidated and Emergency Supplemental Appropriations Act of 1999, Pub. L. No. 105-277, 112 Stat. 2681, 2681-495 (1998).

307. Consolidated Appropriations Act of 2001, Pub. L. No. 106-554, § 515, 114 Stat. 2763, 2763A-153 to -154 (2000).

308. See, e.g., Memorandum from Jim Tozzi to Matthew Winokur (Oct. 12, 1998) (on file with the *Duke Law Journal*) (discussing the origin and effects of the Data Access Act); Chris Mooney, *Interrogations: Thanks to a Little-Known Piece of Legislation, Scientists at the EPA and Other Agencies Find Their Work Questioned Not Only by Industry, but by Their Own Government*, BOSTON GLOBE, Aug. 28, 2005, at C1 (describing the origins of the Data Quality Act).

309. See, e.g., Wendy Wagner & David Michaels, *Equal Treatment for Regulatory Science: Extending the Controls Governing the Quality of Public Research to Private Research*, 30 AM. J.L. & MED. 119, 138 (2004) (noting these inequitable features).

310. See *id.* at 138-39 (describing the effect of the Data Quality Act on the regulatory process).

311. See, e.g., *Salt Inst. v. Thompson*, 345 F. Supp. 2d 589, 593 (E.D. Va. 2004) ("Neither the Act itself nor its very limited legislative history provide a mechanism for judicial review of information quality or any avenue for judicial relief.").

312. See, e.g., Mooney, *supra* note 308.

In settings in which information capture is likely to take hold, rules providing for transparency and open government should be vigorously examined for signs of mischief.³¹³ Information capture is also a reminder that a commitment to open government is not an end in itself, but merely an “institutional design tool” used to effectuate good government.³¹⁴ The effectiveness of transparency and open government thus should not be taken for granted without examining the opportunities for abuse.

3. *An Information Avalanche.* One of the fundamental characteristics of information capture, at least in theory, is that the information excesses and accompanying imbalances in participation will worsen over time and resist easy fixes. Professor Peter Schuck writes eloquently about a related phenomenon, which he calls legal complexity.³¹⁵ In these complex legal landscapes, he writes,

it is no longer enough to know one’s location and destination; one cannot survive without a great deal of local knowledge about when the buses run, whether cabs will venture into certain neighborhoods, . . . and where it is safe to walk. . . . Experienced guides equipped with maps and special know-how are essential³¹⁶

As this dense landscape becomes more complex and labyrinthine, it may even begin to outstrip the ability of these experts to navigate the terrain. At some point, the issues, volume, specialized knowledge, and other features may simply take on a shape of their own, resisting mastery by any of the parties.

Some EPA rules and regulatory programs appear destined to be on a path toward potentially hopeless complexity. In an article now more than a decade old, Professor Eric Orts writes about the problem of juridification, when laws and requirements proliferate and become increasingly complex until the entire regulatory structure “breaks down under its own weight.”³¹⁷ Others have echoed these concerns.

313. Cf. CROLEY, *supra* note 39, at 293 (concluding that the best antidote for a rigorous regulatory system is “increased transparency and participation”).

314. Cf. MASHAW, *supra* note 114, at 191 (“‘Transparency’ thus becomes a strategic institutional design tool, not an end in itself.”); Jasanoff, *supra* note 28, at 22 (noting the limits of transparency in promoting rigorous regulatory science).

315. Peter H. Schuck, *Legal Complexity: Some Causes, Consequences, and Cures*, 42 DUKE L.J. 1, 22 (1992).

316. *Id.* at 20.

317. Eric W. Orts, *Reflexive Environmental Law*, 89 NW. U. L. REV. 1227, 1241 (1995).

Professor Thomas McGarity, in his classic article on ossification, noticed an upward trajectory in the complexity and technical detail in *Federal Register* preambles.³¹⁸ In his study of pesticide policy, spanning from the 1940s through the 1980s, Professor Bosso similarly observes that the “[o]ne dynamic [that] stands out . . . [is that] objective conditions have evolved to higher orders of complexity, but the fundamental relationships paradoxically remain pretty much the same.”³¹⁹

All of these observations raise the rather obvious question of how to put the brakes on a system that is likely to grow only more informationally overloaded and complex over time, in ways that might even lose sight of regulation’s original motivating purpose. It is difficult to imagine that agencies will be able to resist this pull toward increasing complexity on their own, particularly in light of the mandatory open-door policies that they have maintained for so long. Instead, process changes coming from outside the agencies are needed. Several possible reforms are discussed in the next Part.

IV. REFORM

The problem of filter failure runs deep in administrative law, and redressing it may involve a long process of experimentation. The reforms presented here are simply efforts to begin a discussion about reform possibilities. Although some of the reforms seem unduly specific and prescriptive, they are offered primarily in the hope of generating new ways to think about administrative process rather than attempting to cut specific paths through the forest.³²⁰ At the same time, although some of the proposals are unconventional, none of them require radical changes to the existing administrative system.³²¹

318. See McGarity, *supra* note 146, at 1387. For a visual representation of the growth of environmental regulations from 1972 to 2008, see http://www.law.drake.edu/facStaff/docs/T_40_compared.JPG (last visited Feb. 15, 2010) (provided by Prof. Jerry Anderson, Drake Law School).

319. BOSSO, *supra* note 200, at 235.

320. Information capture may also be more amenable to reform than more systemic problems such as scarce resources, White House overrides, and organizational and structural problems that are more deeply engrained within agency structure. See *supra* note 201 and accompanying text. Indeed, if some of the perverse legal approaches to information can be reversed, then it will leave a clearer picture of the intractable regulatory and administrative problems that remain and provide some hope that they can be whittled away gradually.

321. In identifying possible reforms, particular care should be taken to ensure that the fixes proposed for these technical and complex rules will not have adverse side effects on other sectors of regulation in which regulatory problems may be quite different. See, e.g., Gormley,

The reforms track the adverse consequences discussed in Part III and are presented in roughly the same order. See Figure 3.

The bulk of the reforms suggested here attempt to fix the breakdown in the pluralistic process that results when information capture afflicts administrative rulemaking. The adversarial back-and-forth between interest groups, when it works, helps filter information naturally by eliminating some of the peripheral or poorly supported arguments and sharpening the discussion of issues most critical to decisionmaking. It thus not only revives the possibility for more balanced decisions within the agency but also helps make the debates and contests more accessible to a broader audience, including the media, thereby improving the operation of the political process.³²² Although an adversarial approach to regulatory deliberations is inefficient and creates a range of problems,³²³ it is, and likely will remain, a primary mechanism for ensuring administrative accountability.³²⁴ Therefore, the most straightforward approach for

supra note 52 (describing four types of politics (boardroom, hearing room, street-level, and operating room) that arise depending on the relative salience and complexity of the subject matter). In fact, some of the sharpest criticisms of Professor Sunstein and then-Judge Breyer's work take issue with their tendency to overgeneralize about the regulatory state from their more narrow examples of problematic rulemaking and to ignore the dominant role of industry in their analysis. *See, e.g.*, FRANK ACKERMAN & LISA HEINZERLING, PRICELESS: ON KNOWING THE PRICE OF EVERYTHING AND THE VALUE OF NOTHING *passim* (2005) (systematically arguing against the use of cost-benefit analysis as urged by Professor Sunstein and others); David A. Dana, *Setting Environmental Priorities: The Promise of a Bureaucratic Solution*, 74 B.U. L. REV. 365, 376–81 (1994) (reviewing BREYER, *supra* note 209) (questioning Judge Breyer's neglect of interest group politics in his analysis and suggesting that this is a serious omission); Eric J. Gouvin, *A Square Peg in a Vicious Circle: Stephen Breyer's Optimistic Prescription for the Regulatory Mess*, 32 HARV. J. ON LEGIS. 473, 482–83 (1995) (reviewing BREYER, *supra* note 209) (criticizing Judge Breyer's analysis for totally ignoring public choice theory); Lisa Heinzerling, *Justice Breyer's Hard Look*, 8 ADMIN. L.J. AM. U. 767, 767 (1995) (arguing "that the set of agency decisions that are 'in fact highly irrational' is, for Breyer, small but not empty" (quoting Stephen Breyer, *Judicial Review of Questions of Law and Policy*, 38 ADMIN. L. REV. 363, 395 (1986))); Stephen F. Williams, *Risk Regulation and Its Hazards*, 93 MICH. L. REV. 1498, 1503–06 (1995) (reviewing BREYER, *supra* note 209) (criticizing Judge Breyer for neglecting to account for interest group politics in his analysis).

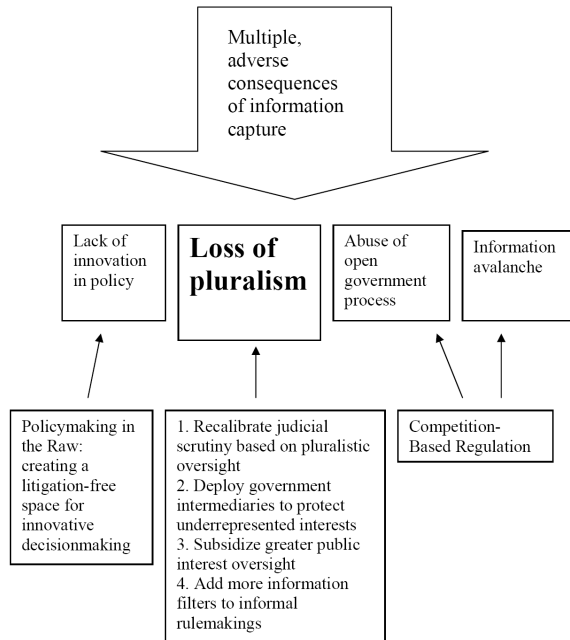
322. *See generally* Nathanson, *supra* note 42 (explaining that policy arguments must be both socially and scientifically credible).

323. *See generally* KAGAN, *supra* note 150 (studying the problems that the adversarial process introduces into American law); Stewart, *supra* note 6, at 1670, 1686 (describing the rulemaking process as muddled by competition between governmental authority and private autonomy and by inadequate consideration of important interests).

324. Implicit in this effort to reinforce pluralistic processes (though as will be discussed, that is not the sole ingredient to reform) is the argument that adversarialism should not be dismissed across the board and is sometimes beneficial (at least in settings in which there are no alternatives for sharpening the deliberations). *Cf.* KAGAN, *supra* note 150, at 226 (conceding the

reform is to revitalize the pluralistic process in these complex rulemakings.

Figure 3. Matching Reforms Tied to the Adverse Consequences of Information Capture



Matching Reforms

A second type of reform circumvents adversarial processes altogether and instead proposes a litigation-free space in which regulators are expected to innovate and devise effective regulatory solutions free of constraints imposed by interest group pressures. One of the disadvantages of rigorous adversarial processes, even when they work, is that the participants' agenda can control the regulators'

benefits of adversarial legalism with respect to its potential to “give all interests a voice,” but arguing that, when used without limits, it “can make the government *disproportionately* responsive to those who do wield” the mechanisms of adversarial legalism). In situations in which information costs are likely to rise very high and the parties are equally matched, adversarialism may be one of the best mechanisms available to control information costs, particularly if these costs have grown higher than can be realistically addressed through other means.

framework for thinking about the problem. This reform would create an opportunity for the agency to initiate the regulatory project without the constraints imposed by interest groups. Indeed, under this reform, the agency would not only have the opportunity but would also be required to consider regulatory alternatives free from stakeholder and legal distractions.

A third reform proposes a triage strategy that divides and conquers dominant participants who have captured the process by using competition-based strategies to pit them against one another. Specifically, some first movers among the regulated sector can enjoy advantages in the market and regulatory process by identifying gaps in regulatory coverage that, when filled, give them a competitive edge over laggards. This competition-based approach is particularly useful for redressing the more deeply embedded information capture problems of the past because it provides incentives for heavily invested parties to penetrate enormous rulemaking records. The net result, however, is that the public benefits because these parties' efforts will ultimately highlight areas of slippage and thus ensure that regulations do not drift too far from their statutory and public missions.

A. Reforms to Reinvigorate Pluralistic Engagement in Rulemakings

Although existing administrative procedures impose no filter on the information used to support the rulemaking process, there appears to be an assumption that some filtering will nevertheless take place through pluralistic oversight. The problem with this assumption is that in some, and perhaps many, settings, the information-related costs associated with participation are so high that an entire sector of affected interests may not be able to participate. When this happens, the adversarial process breaks down, leading to information capture.

There are several ways to reinvigorate more balanced and diverse interest group engagement in complicated rulemakings. This Section discusses each in turn.

1. *A Participation-Based Standard for Judicial Review.* Given that the courts inadvertently create many of the incentives for regulatory participants to engage in information capture, correcting the standards for judicial review should be a top priority. The courts' current approach to judicial review is to evaluate the agency's rule based on the information filed by interest groups in protest to the rule and to determine, as a substantive matter, whether the agency's

response was arbitrary.³²⁵ Agencies risk being reversed if their final rule is considered inadequate in light of a significant comment raised on the proposal.

The proposal here shifts the courts' focus from substance to process.³²⁶ The proposed reform links the standard for review to the rigor of interest group engagement in a rulemaking. Rulemakings dominated by one set of interests from start to finish would trigger a skeptical review. On the other hand, if the underlying interest group representation was healthy, vigorous, and diverse, the court would create a strong presumption in favor of the result the agency reached.

The logic behind the approach is that a robust, pluralistic process is likely to discipline the agency's outcomes and results. By contrast, when it is evident that the development of the rules did not involve diverse participation from affected interest groups, the courts are needed to ensure that the deals incorporated into the rule do not stray too far from the statutory goals. Indeed, for rules that are developed without strong political oversight and adversarial vetting, the courts may be the last hope in providing some accountability.

The standard for review, then, would depend on the robustness of interest group participation in the rulemaking. See Figure 4. If a diverse and balanced group of affected parties is involved throughout the rulemaking, then the agency's rule would be afforded considerable deference from the court—a “[s]oft [g]lance” or something similar.³²⁷ On the other hand, if one party dominates all phases of the rulemaking and then sues the agency for failing to make certain accommodations based on its comments, the court would have

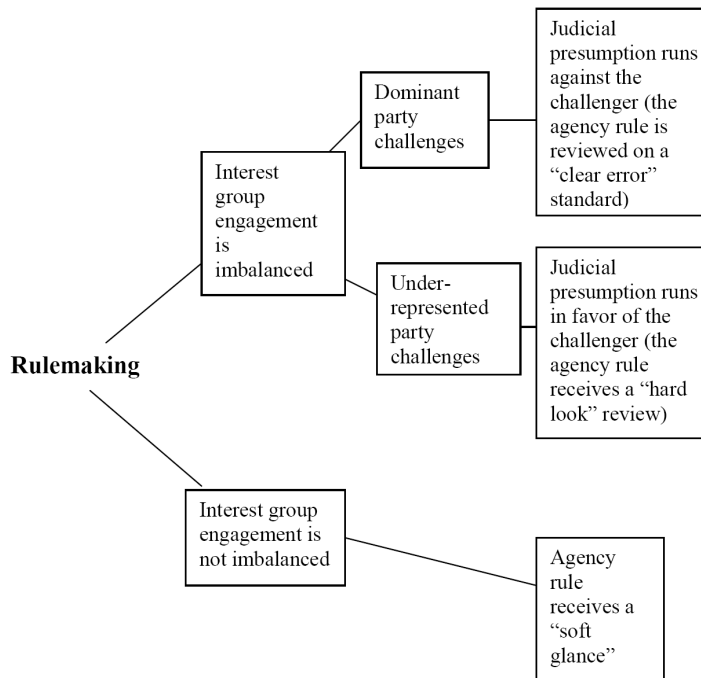
325. 5 U.S.C. § 706 (2006).

326. Professor Rubin's idea of breaking the ties between rulemaking and stakeholder comments helped generate some of this Article's recommendations. See Rubin, *supra* note 119, at 157 (arguing that rulemaking should be dictated by “instrumental rationality, rather than . . . public participation”). Specifically, Professor Rubin proposes a significant shift in the basis for judicial review that parallels, or at least seems quite complementary to this proposal because it tries to break the link between stakeholder pressure and regulatory analysis. See *id.* at 157–63. As discussed in note 375, *infra*, however, there are some significant differences that lead the proposals in slightly different directions with respect to redressing information capture.

327. Thomas O. McGarity, *Professor Sunstein's Fuzzy Math*, 90 GEO. L.J. 2341, 2371 (2002); see also *id.* at 2372 (agreeing with Professor Sunstein on the idea of a more deferential standard of review in which “courts should play an exceedingly deferential role” and “should give agencies the benefit of every reasonable doubt” (quoting Cass R. Sunstein, *The Arithmetic of Arsenic*, 90 GEO. L.J. 2255, 2259 (2002))). In an earlier article, Professor McGarity provided greater elaboration on how this more deferential test might work. Under his formulation, judges would adopt the posture of a “pass-fail” professor reviewing a research paper about a complex problem on a topic outside her field of expertise. McGarity, *supra* note 146, at 1452–54.

a strong presumption against the challenger. In this case, the court would afford the agency still more deference, along the lines of the clear error standard used in the appeal of fact from jury trials. By contrast, if a challenger was unable to engage in the rulemaking process because it lacked sufficient resources or specialized knowledge, but its members took a great interest in the consequences of the rule, then the court (almost like it treats parties proceeding pro se) would adopt a presumption in favor of the challenger's petition and afford the rule a hard look. Effectively, the courts' review—ranging from hard look to considerable deference—would be calibrated to the robustness of the pluralistic process.

Figure 4. A Flow Chart of the Participation-Based Standard for Judicial Review



At present, there appears to be little connection between the robustness of the pluralistic process and the level of scrutiny afforded to an agency's rule. Instead, the rigor of the agency's process is

evaluated only with regard to whether the agency complied with a short checklist of APA requirements, like providing a publicly accessible record, providing ample opportunity for notice and comment, and so on. The apparent assumption underlying the courts' process-based review is "if you build it [an open and transparent administrative system], they will come." If, as it now seems, many affected interests might not come when information capture has taken hold of the rulemaking process,³²⁸ the courts' obligation to dig deeper into the record to evaluate the rigor of the pluralistic process seems inescapable.

This participation-based standard for judicial review thus seeks to use the courts to help level inherent participatory imbalances, rather than allowing them to aggravate these imbalances, however unwittingly. If the agency is not attentive to vigorous engagement by the full range of affected parties, for example, it would risk a hard look review of its rule if one of the underrepresented groups decides to file a challenge. Indeed, because of this risk, the agency would have litigation-based incentives to take the comments of underrepresented parties quite seriously, despite their small number. Even more importantly, they would have strong incentives to reach out and engage groups that are likely to be underrepresented in the rulemaking process. The retention of hard look review thus reserves an important role for courts when important affected interests are absent and when the likelihood for democratic lapses, whether inadvertent or deliberate, are high.

Calibrating the judicial review standard to the level of pluralistic participation in the rulemaking process may even provide dominant stakeholders with some incentives to engage their adversaries in the substance of a rulemaking. If dominant stakeholders wish to threaten the agency with a credible risk of reversal by the courts (that is, a soft glance review standard rather than clear error), they would need their adversaries to be present at least during the notice-and-comment period. Incentives for balanced involvement in the rulemaking process might at least partly counteract the incentives these same stakeholders currently have, via information capture, to overwhelm adversaries with voluminous information about specialized issues and

328. This in fact seemed clear at least to political scientists more than two decades ago. See Gormley, *supra* note 52.

contestations that weigh down the rulemaking and make it less accessible.³²⁹

The recommended adjustment to judicial review—tying judicial deference to the robustness of the pluralistic process—might even make judicial review more predictable. A number of commentators have suggested that the uncertainty associated with judicial review causes some of the most serious problems in agency behavior.³³⁰ This uncertainty can cause agencies to act defensively, bloating the record and rule well out of proportion to what is necessary. Even more importantly, stakeholders can take advantage of the situation by using the threat of judicial review as a strategic tool, even when their claims are weak.³³¹ To the extent that the test suggested here can be implemented in a more consistent and predictable way than the current approach to judicial review, it will reduce at least some of this uncertainty.³³²

329. Cf. Elliott, *supra* note 176, at 1495–96 (“If the notice-and-comment procedure is to function to promote genuine dialogue, as opposed to merely giving parties a chance to put their objections and the agency’s answers on the record for judicial review, it will have to be re-engineered to promote the substance of dialogue through the process of representation.”).

330. See, e.g., MASHAW, *supra* note 114, at 165 (concluding that the most commentators “seem to argue that the real impediment created by judicial review is uncertainty”); see also *supra* notes 150–54 and accompanying text.

331. See *supra* notes 299–305 and accompanying text.

332. Given that judicial review can be employed not only to alter the rule but also to delay the proceedings and forestall compliance costs or other unwanted outcomes, the proposal will not protect against all information-related abuses. An additional adjustment to this pluralistic-based review standard would attempt to reduce even more of the benefit (and incentive) for using litigation in part as a way to delay rulemaking. The most obvious approach would be to keep the final rule in place pending ultimate reversal by the courts, or even better, to delay the ability of a stakeholder to bring a case until it is ripe and imposes specific losses on a party. Professor Mashaw persuasively argues for the complete elimination of preenforcement review, not only to redress some of this strategic abuse, but also to reduce some of the uncertainties faced by the courts in resolving preenforcement challenges. See MASHAW, *supra* note 114, at 177–80 (suggesting that altering the timing of judicial review may help reverse the strong incentives that some parties have to challenge rules excessively). If the parties must wait for a tangible harm to the challenger, then in adjudicating the claim, the court will be presented with real facts rather than abstracted argument and hypothetical worries. See *id.* As Professor Mashaw concedes, however, there are risks associated with legally requiring parties to comply with a contested standard, only to determine through a legal challenge filed years later that the standards were in fact set arbitrarily high. See *id.* Ultimately, additional research on past cases and settlements may reveal that the risks of eliminating preenforcement review are quite inflated and that the harm in most cases of delaying litigation will be trivial or at least not very significant. Alternatively, higher sanctions could be imposed on a party for petitioning for judicial review when a court later finds the claims to be largely nonmeritorious. This more timid proposal might be the best way to begin, as it presents the fewest risks of unintended side effects.

This calibrated approach to judicial review is not a panacea, however. A number of impediments must be addressed if the reform is to be successful. First, the courts would need a way to determine, with some consistency, when this imbalance has occurred. This involves first identifying who the potential affected groups are and fitting them into categories of affected interests. Conveniently, for most environmental rulemakings, categorizing participants according to the interests they represent should not be difficult.³³³ Second, the test requires determining when the ratio between a dominant group and other affected parties constitutes an unacceptable imbalance. For a variety of reasons, this point of imbalance must be more dramatic than simply the point at which the number of commenters from industry are slightly greater or fewer than the number of commenters from public interest groups.³³⁴ Instead, imbalance would need to be a point at which, for example, the ratio of one set of affected parties relative to the other set is four to one, ten to one, or even twenty-five to one. Under current docket rules, the comment process may provide the appropriate place to assess this balance or imbalance. If docketing were required for all communications, including those occurring during the pre-NPRM stage, then all contacts could be added from the rulemaking docket to determine the extent to which participation is balanced or imbalanced.

Even with relatively clear rules for determining imbalance and the corresponding standard for review, there will be inevitable variations in how courts employ the applicable soft glance or hard look tests. These variations, however, are likely to be more modest and less worrisome than the current roulette-like variations in the courts' opinions, which range from hard look to super deference, depending on the panel.³³⁵ If the recommended reform were

333. For example, empirical studies of stakeholder participation in EPA rulemakings by Professor Coglianesi, *supra* note 47, and Professors Yackee & Yackee, *supra* note 247, did not suggest any difficulty with categorizing stakeholders into affected groups.

334. Such a point of imbalance would mean that the use of "soft glance" is the exception rather than the rule because rarely would rules receive this kind of balanced vetting.

335. *See supra* notes 150–54 and accompanying text. At the Supreme Court level, it is possible that clearer tests may not overcome the lack of structure and consistency in applying the various deference tests. *See, e.g.*, William N. Eskridge & Connor N. Raso, *Chevron as a Canon, Not a Precedent: An Empirical Test of What Motivates Judges in Agency Deference Cases* (Conference on Empirical Legal Studies Paper, Jul. 28, 2009), available at <http://ssrn.com/abstract=1440392> (finding motive-based explanations for the Supreme Court's varying approaches to judicial review of agency decisions). It seems plausible, however, that the use of

implemented, this variation would at least be within categories of a single standard of review, rather than the full range of possible standards.

There are other possible problems with practical implementation of this proposal. First, although a party's dramatic underrepresentation creates the risk of hard look review, a party that is not present at all in notice and comment (that is, its presence is zero) would lose the opportunity to sue because it lacks standing.³³⁶ As an unintended side effect, then, the proposal might make the agency and dominant stakeholders more, not less, eager to use information capture as a means of cutting underrepresented groups out of the rulemaking process. The solution here might be to broaden standing to include, in extreme cases, those parties who did not file comments but who have a compelling reason to enlist the courts in review and can justify their inactivity during the notice-and-comment period.

Second, a collection of stakeholders, particularly public interest groups, may actually game the revised approach by holding back on their comments during notice and comment in the hope of using the hard look threat against the agency later, during litigation (or settlement negotiations). Although this does not seem likely for a host of reasons,³³⁷ the suggested rules do open the door to this new

clear guidelines in the appellate courts could improve the state of judicial review at this critical level of agency review.

336. See *supra* notes 163–67 and accompanying text. This may not be unusual. The Coglianese study found that environmental groups provided comments on only 44 percent of the EPA rules governing hazardous waste handling and disposal during the period under study; industry, by contrast, provided comments on 96 percent of the rules. See Coglianese, *supra* note 47, at 50 tbl.2-2. State and local regulators may have been involved in the 56 percent of rulemakings that lacked public interest representations, thus picking up the slack for their absence. It is possible, however, that for at least a significant set of rules—say 30 percent or so—there was no public interest representation at all, either by the nonprofits or by government regulators who sometimes (though not always) step in the shoes of the public interest.

337. If some of the current figures are correct, then industry, if it used this strategy, would be able to file very few comments—perhaps no more than one comment among themselves—to be considered underrepresented relative to environmental groups. See Coglianese, *supra* note 47, at 48 (observing in his study that the relative ratio of industry to public interest commenters was about fifteen to one, whereas the ratio of industry to state or local regulators was about three to one). The public interest groups, by contrast, would have to come to terms with the delay that resulted from their legal challenge. This might not be problematic, however, for rules for which delay is actually environmentally beneficial (when standards are being loosened, rather than strengthened). It also may not be terribly problematic if the public interest group is petitioning for suit with the intention of settling the case swiftly, and thus plans to use the threat only to gain more concessions from the agency through post-rule negotiations.

type of strategic action. The solution here may be to add a more rigorously enforced good faith requirement to the petition process. The petitioners would need to explain why they were not able to participate more vigorously during the rulemaking process and convince the court that they were proceeding in good faith in the challenge that followed.

Third, some stakeholders might be tempted to further redirect their energies from formally participating in the process during notice and comment to informally communicating with the agency, particularly during the pre-NPRM stage of the rulemaking. The corrective in this case could be to require a complete accounting of all interest group participation occurring throughout the entire life cycle of the rule's development and to have the courts consider those docketed communications when assessing imbalance.³³⁸ Additionally, the courts could overrule current precedent that requires the proposed rule to be reopened for comment if the agency makes material changes in a final rule.³³⁹ Instead, material changes (provided they result from comments) would be allowed as long as the changes do not substantially handicap one or more affected parties in significant and inequitable ways.

If this revised approach to judicial review still seems sensible once the kinks are worked out, it could be implemented interstitially by the courts or, ideally, passed into law as an amendment to the APA. A congressional amendment would provide the clearest and most democratic way to usher in the new approach to judicial review. This may be politically unrealistic, however.³⁴⁰ The courts could also make many of these recommended changes through their interpretative authority; indeed, in most cases, this Article's proposals simply scale back previous judicial inventions.³⁴¹ Incremental experimentation by the courts may, in fact, be desirable to give the approach a test run before it becomes codified as law.

338. See *supra* notes 334–35 and accompanying text.

339. See *supra* notes 179–83 and accompanying text.

340. Such a revision to the APA may not be amenable to industry because it would curb some of their gains from defects in the system over the last four decades. This could fracture congressional support for what would otherwise seem a bipartisan, process-neutral amendment.

341. Cf. *Pierce*, *supra* note 155, at 910–20 (arguing that the Supreme Court should abolish three administrative law doctrines: limits on ex parte communication between agencies and interested parties during informal rulemaking; bans on bias and prejudgment of issues by agency officials; and requirements that (a) a final rule be the logical outgrowth of the rulemaking process, and (b) the agency disclose all data and studies relied upon in forming the final rule).

2. *Appointed Advocates or Adjudicators to Replace the Lack of Balanced Engagement.* Reformed judicial review may help encourage more pluralistic engagement in rulemakings, but it will not be sufficient to ensure that missing interests are represented in all rulemakings vulnerable to information capture. A more comprehensive, but also more costly, method to redress pluralistic imbalance would deploy government intermediaries—agency-selected ombudsmen, advocates, advisory groups or even administrative law judges (ALJs)—to stand in for significantly affected interests that might otherwise be underrepresented in rulemakings. The concept of formal, government-provided advocates in these types of settings is not new.³⁴² In fact, the proposal has some of the flavor of the Small Business Reform Act, which institutes a rather elaborate network to ensure that the interests of small businesses are adequately considered.³⁴³

There are different ways that this type of government intermediary might ensure that missing interests are represented. Agency ombudsmen or advocates acting on behalf of missing interests could scrutinize all rulemakings to ensure, for example, that the agency is considering not just the economic costs of standards but also the public health benefits, particularly with regard to vulnerable populations.³⁴⁴ If these interests are not adequately considered in the

342. See, e.g., Stewart, *supra* note 6, at 1711 (discussing, with some reservations, the possible use of a specialized, high-level government advocate to represent diffuse interests); see also *id.* at 1761 n.439 (providing a relatively extensive bibliography of proposals in the early 1970s for the creation of advocate agencies to represent the interests of poor or other underrepresented groups in consumer protection and related proceedings).

343. The Small Business Regulatory Enforcement Fairness Act of 1996, Pub. L. No. 104-121, 110 Stat. 857, was based in part on a concern that information excesses precluded smaller businesses from keeping up with bigger competitors in the provision of regulation. See *id.* §§ 202–03, 110 Stat. at 857–58 (finding that small businesses were disproportionately burdened by current regulatory procedures and declaring the intention of simplifying the regulatory process and making it more cooperative and accessible to small businesses). The Act, among other things, provides small businesses with an agency ombudsman and related advocates to help protect their interests. See, e.g., Thomas O. Sargentich, *The Small Business Regulatory Enforcement Fairness Act*, 49 ADMIN. L. REV. 123, 131 (1997) (describing these qualities of the Act).

344. The need for adequate representation in public health and environmental regulation is at least as pressing for communities located in areas with heavy pollutant loads as it is for small businesses, for example. Currently these groups—without or even with legal assistance—confront a wall of complexity and strategic evasion that makes it next to impossible for them to press their claims or even determine the source of excess pollution in their communities. See, e.g., Capiello & Olsen, *supra* note 85 (commencing a five-part series on industrial pollution in low-income Houston neighborhoods).

proposed rule stage, the advocate would be required to file comments and build a record for review that could be used by other regulatory participants in the course of judicial review. Because the effectiveness of this representation may be difficult to measure and oversee, however, the use of government advocates may be an incomplete remedy.

Alternatively, rulemakings that are highly technical and suffer from imbalanced engagement during notice and comment could trigger an advisory review process in which an expert committee is assembled to review the rule to ensure that issues relevant to missing affected interests (for example, diffuse public benefits such as health protection) have been adequately considered in developing the rule.³⁴⁵ As in current law, the agency would not be required to adopt the suggestions of advisory groups, but a record would be created that could be used as the basis for judicial review. The agency may even be required to respond to critical advisory group opinions or risk the chance of increased judicial scrutiny. The resulting record thus would not only provide an added hook for judicial review challenges brought by an underrepresented group but also should make the underlying issues more accessible to the broader political process.³⁴⁶

A hybrid rulemaking, which employs some requirements of formal rulemakings in an informal rulemaking process, could provide an even more rigorous mechanism for ensuring that the most important affected interests are represented, albeit with a higher price tag. There are many permutations, but the basic idea is for an ALJ to preside over a hybrid rulemaking, either conducted on paper or through a formal hearing, with the agency representing the proposed

345. Cf. 42 U.S.C. § 7409(d)(2)(B)–(C) (2006) (establishing that the Clean Air Scientific Advisory Committee (CASAC) should review the EPA’s ambient air quality standards at five-year intervals). A similar type of scientific review is required for the EPA’s registration of pesticides. 7 U.S.C. § 136w(d)–(e) (2006) (requiring the Scientific Advisory Panel established under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) to review the scientific basis for major regulatory proposals concerning pesticides and to adopt peer-review procedures for scientific studies carried out pursuant to FIFRA).

346. The EPA’s recent decision to reject CASAC’s advice on a more stringent revised standard for fine particulates serves as a case in point. See, e.g., Erik Stokstad, *EPA Draws Fire over Air-Review Revisions*, 314 SCIENCE 1672, 1672–73 (2006) (noting that criticism of the EPA’s revision of its review policies largely stemmed from the EPA’s rejection of CASAC’s advice to tighten air quality standards for soot); Jane Kay, *EPA Ignores Advice for Annual Limits on Tiny Soot*, S.F. CHRON., Sept. 22, 2006, at A3, available at <http://www.sfgate.com/cgi-bin/article.cgi?f=c/a/2006/09/22/MNGJBLABRM1.DTL> (detailing the disappointment among environmental and health groups when the EPA ignored a recommendation agreed to by twenty of the twenty-two members of CASAC).

rule and an advocate, either private or government-appointed, commenting on weaknesses of the proposed rule from the standpoint of underrepresented affected interests. Such a hybrid rulemaking would provide even more formal assurance that all interests affected by the rulemaking have received adequate consideration. Due to the added time and cost, the hybrid process would need to be reserved for rules that involve substantial effects on important affected interests wholly unrepresented during the notice-and-comment process.³⁴⁷ The advantage of this more formal process is that the ALJ would issue binding decisions rather than act merely as a government advocate or advisor.

3. *Reinvigorating Representation of Underrepresented Groups Like the Diffuse Public Interest.* A less radical approach to increasing balanced engagement in at-risk rulemakings is to subsidize participation on specific rulemakings in which certain sets of interests, such as those representing the diffuse public, will be otherwise underrepresented.³⁴⁸ Alternatively, rewards could be offered to indirectly increase incentives for this same type of public-benefitting representation.³⁴⁹ For example, a monetary prize and positive publicity could be awarded to the author of the most meaningful public-benefitting set of comments on a complex rule, particularly if the party approaches the issues from the perspective of improving public health or environmental protection. Much like architectural prizes, there could even be law school or graduate student competitions not only for commenting on a rule but also for proposing compelling policy innovations.³⁵⁰ An interest group would

347. This could be required for rules with significant implications for unrepresented affected parties, a finding that is made along with other determinations of significance already required under Executive Order 12,866.

348. If public interest groups are subsidized, however, it is critically important that the subsidies require them to engage in the low-salience, highly technical rules vulnerable to information capture rather than other more publicly visible controversies in which they are likely to have a presence with or without public subsidies.

349. For more general discussions of the desirability of bolstering participation of the diffuse public, see, for example, Gerald E. Frug, *Administrative Democracy*, in HANDBOOK OF REGULATION AND ADMINISTRATIVE LAW 519, 529–31 (David H. Rosenbloom & Richard D. Schwartz eds., 1994); Steven Kelman, *Adversary and Cooperationist Institutions for Conflict Resolution in Public Policymaking*, 11 J. POL'Y ANALYSIS & MGMT. 178, 200–03 (1992); Robert B. Reich, *Public Administration and Public Deliberation: An Interpretive Essay*, 94 YALE L.J. 1617, 1635–40 (1985).

350. Cf. EPA, P3: People, Prosperity and the Planet Student Design Competition for Sustainability, <http://www.epa.gov/ncer/p3/> (last visited Feb. 15, 2010).

then be permitted to challenge the rulemaking on behalf of the winning submitter if the agency ignores those comments, and would be entitled to reasonable attorney fees if the group substantially prevailed in the litigation. Through these mechanisms, interest groups and like-minded experts might find that the prospect of remuneration provides an incentive to engage in complex rulemakings that overcomes the disincentives of participation created by the information capture phenomenon.

A more indirect approach to increasing the benefits of participation for public interest groups is to raise the public visibility of more obscure and complex environmental rulemakings. A rulemaking that becomes newsworthy because of its public interest implications also becomes one that interest groups will find marketable, donor-friendly, and worthy of investment. On the other hand, if nonprofit resources are scarce and finite, raising the salience of one rule may simply lead the groups to withdraw their engagement from another less-newsworthy rule.

If increasing the salience of a rule does increase the resources available for public interest engagement, the agency under this proposal would be required to provide an estimate of the rule's public health benefits and an assessment of what alternate versions of the rule might accomplish in public health terms. For example, the agency would be required to estimate the health and environmental benefits that would result from the promulgation of a particular pollution control standard and to estimate these same benefits associated with other, alternative versions of the standard. Public health assessments in these cases, by their nature, cannot be very detailed—the uncertainties make this futile—but the results of a basic assessment might help identify an informative range of possible health and environmental consequences, at least qualitatively. Resources currently devoted to regulatory impact assessments, which tend to highlight the costs of regulation at the expense of assessing and raising the visibility of public health benefits, could be used to fund these public health-oriented analyses.³⁵¹ The regulatory impact assessment may be a valuable innovation, but as implemented it misses the core analytical problem with much public health and

351. Cf. Harrington et al., *supra* note 273 *passim* (providing case studies of high-profile RIAs at the EPA that raise a number of challenging questions about the value of the RIA process, at least as currently practiced, and open the door to considering the reallocation of these analytical resources to more productive endeavors).

environmental regulation—the obscure, unspecified public benefits—and exacerbates this blind spot by focusing almost exclusively on the costs to regulated parties.

More attention may also need to be given to the choice of legislative standards and regulatory tools with respect to their potential for increasing the salience of EPA rules.³⁵² For example, performance standards, like ambient air standards or related types of innovations, seem more likely to engage balanced constituencies in discussions about how they are set as compared with technology-based standards³⁵³ and standards governing industrial activities and operations (like many of the rules governing hazardous waste operations in RCRA).³⁵⁴ Technology-based standards may be at higher risk of falling prey to information capture because they involve complex processes and because the health implications associated with them are more difficult to evaluate.³⁵⁵ On the other hand, these

352. As a legislative matter, information capture may also provide a barometer to help identify when certain added requirements on regulatory agencies are likely to improve or instead exacerbate information capture. Evidence that a new process requirement might inflate information costs or make a process susceptible to information capture could create a presumption against the new process that must be overcome by the proponent. *See, e.g.*, Sargentich, *supra* note 343, at 137 (arguing that this problem afflicts the Small Business Reform Act); *supra* notes 308–12 and accompanying text. Alternatively, there could be mandatory look-back studies, perhaps every three years, prepared by the Congressional Research Service to evaluate how various processes affect information management in the agencies and also to determine whether they are used by a balanced constellation of groups or instead used primarily by dominant or rich stakeholders.

353. I have been a longtime proponent of these standards. *See* Wagner, *supra* note 83.

354. *See, e.g.*, National Ambient Air Quality Standards of the Clean Air Act, 42 U.S.C. § 7409(b)(1) (2006). For a slightly more extended discussion of why these standards are likely to invite a more balanced group of affected parties, see Lynn Blais & Wendy Wagner, *Emerging Science, Adaptive Regulation, and the Problem of Rulemaking Ruts*, 86 TEX. L. REV. 1701, 1733 (2008). These performance standards are generally premised on health outcomes or related measures, so the salience accompanies the exercise and is harder to shake out, even with voluminous records and very complicated and technical issues. Indeed, commentators who are particularly enamored with performance standards as a preferred means of regulation seem to intuitively appreciate that they work better because they are direct and goal-oriented, cutting through the many steps and assumptions that underlie many other types of regulatory standards. *See, e.g.*, Stephen D. Sugarman & Nirit Sandman, *Fighting Childhood Obesity Through Performance-Based Regulation of the Food Industry*, 56 DUKE L.J. 1403, 1411–13 (2007) (touting the virtues of performance standards, based on these general attributes, as compared to command-and-control standards).

355. Market-based programs may also suffer from information capture if there are a number of hidden details that determine how well the market will work or how well it will address the health issues on the table. *See, e.g.*, Lisa Heinzerling, *Selling Pollution, Forcing Democracy*, 14 STAN. ENVTL. L.J. 300, 318, 320–25 (1995) (concluding, based on detailed investigation of the congressional debates, that the title IV market “created by the 1990 Amendments owes much of

standards have important virtues (expediency, for example) that may significantly outweigh their vulnerability to information capture and that therefore must be taken into account.³⁵⁶

4. *Information Filters on Participants.* A final reform to reinvigorate more balanced engagement by all affected interests would encourage or even mandate flat restrictions on the information that participants can load into the rulemaking process.³⁵⁷ Establishing simple filters on the amount and type of these communications will not solve all problems—there will still be a temptation to fill comments with highly specialized and undigested information. Nonetheless, establishing these filters would be a good start. At the very least, the filters would force all participants to begin to control information excess at the margin.

The first set of recommended reforms advocate limits on the size of the communications that participants can share with the agency, including minimum standards to ensure the reliability of technical assertions. These restrictions could be quite simple—for example, imposing page and volume limits on the filings, much like the limits placed by appellate courts on appellants.³⁵⁸ Courts could also play a

its content to the influence of special interest groups” but that many of these deals were invisible and hidden under the seemingly accessible market-based approach).

356. See, e.g., Wagner, *supra* note 83, at 92–107 (recounting some of these virtues).

357. The possibility of infringements on the First Amendment right to free speech arising from page and related restrictions on formal communications in the administrative process seem unlikely, but are nevertheless conceivable. Cf. *Burriola v. Nev. Dept. of Corr.*, No. 3:07-CV-102 JCM (VPC), 2008 WL 510231, at *6 (D. Nev. Feb. 22, 2008) (discussing, without issuing a holding on, a prisoner’s contention that page limits allegedly imposed by the prison on his correspondence abridged his First Amendment rights and concluding ultimately that “there is no evidence, nor does plaintiff contend, that his speech was chilled or he suffered ‘actual harm’ as a result of the denial of this general correspondence due to page limits”). If size restrictions placed on formal administrative communications are reasonable and are likely to advance the goals of administrative process, then the general sense seems to be that they are safe from a successful First Amendment challenge. See, e.g., Kathleen M. Sullivan, *The Intersection of Free Speech and the Legal Profession: Constraints on Lawyers’ First Amendment Rights*, 67 *FORDHAM L. REV.* 569, 569 (1999) (observing that “[r]ules of evidence and procedure, bans on revealing grand jury testimony, page limits in briefs, and sanctions for frivolous pleadings, to name a few, are examples of speech limitations that are widely accepted as functional necessities in the administration of justice, much like rules of order in a town meeting” and concluding ultimately that restrictions imposed to streamline the administration of justice are typically given wider berth under the First Amendment).

358. See, e.g., U.S. COURT OF APPEALS, FIFTH CIRCUIT, CHECKLIST FOR PREPARATION OF BRIEFS AND RECORD EXCERPTS (2008), available at <http://www.ca5.uscourts.gov/clerk/docs/brchecklist.pdf> (specifying very specific and strict limits on the form and size of briefs filed in

supporting role by scrutinizing comments to ensure that the issues raised to the agency were clear and accessible and not obscured by dozens of detailed sub-issues. Participants could also be required to verify the reliability of the data presented and provide supporting analysis for critical assertions of fact. Although these suggestions are simple, they might be quite effective in capping the amount of information that a party can introduce into the regulatory system.³⁵⁹

Evidence suggests that investing energy and time in collating, digesting, and communicating issues in a succinct way can dramatically improve the quality of a communication, while also increasing the likelihood that the recipient (here, the agency) will receive the intended message.³⁶⁰ As one trade association explained to Professor Coglianesse in his study:

EPA started its proposals and our comments took up a space on my bookshelf this thick [respondent holds hands about one-and-a-half feet apart]. So to me the fact that we whittled it down to 100 pages [to meet the appellate court's page limit] is pretty remarkable. There were a lot more issues that we conceded later were not—you know we were just whining—we didn't have a good recommendation for an alternative approach for EPA to take. So a lot of issues fell off over the years.³⁶¹

Even if encouraging or requiring limits on communications does not yield significant benefits in every case, establishing these limits would signal that information flowing into the agencies should be restricted and, at the very least, would initiate a conversation about how to

the Fifth Circuit). For a short discussion of the fate of possible First Amendment challenges to such restrictions, see *supra* note 357.

359. This proposal also shifts primary information filtering responsibility onto participants, who generally are best able to do this processing at the lowest cost. *But see* Alan Raul & Julie Zampa Dwyer, "Regulatory Daubert": A Proposal to Enhance Judicial Review of Agency Science by Incorporating Daubert Principles into Administrative Law, 66 LAW & CONTEMP. PROBS. 7, 8 (2003) (effectively recommending that the agency be held responsible for filtering the reliability of communications coming from affected parties).

360. *See, e.g.*, Smith, *supra* note 21, at 1150 (observing that information theory suggests that "[t]he more impersonal contexts will require greater formality, so that the typical audience member will not incur large processing costs").

361. Coglianesse, *supra* note 47, at 112. Another attorney conceded that the appellate brief was unsuccessful in part because the brief writers had failed to do an adequate job of controlling information excess: the brief "was so filled with so many issues of such a technical nature that I think we got lost in explaining basically how simple this one [issue] was." *Id.* at 111 (alteration in original).

encourage participants to be more concise and clear in the information they submit to the agency.

A second, related information filter involves limiting the number of contacts between agency staff and stakeholders throughout the rulemaking cycle. This is probably best accomplished by requiring the agency to log all ex parte communications into the rulemaking docket and ensuring that detailed records of each communication are available upon request.³⁶² Unlike the current process, which places no limits or recording requirements on ex parte communications occurring before the publication of the proposed rule, a requirement of greater transparency for communications has the potential to improve accountability and may even cause participants engaging in pre-NPRM contacts to use them sparingly.

Finally, the agency itself should be encouraged to filter the communications incorporated into proposed and final rules to ensure that the rules are accessible to a diverse, albeit sophisticated, group of affected parties.³⁶³ As discussed earlier, the APA's concise general statement requirement has effectively been ignored and, if anything, rewritten by the courts to demand a defensive, "encyclopedic" statement from the agency.³⁶⁴ The judicial demands that cause the agency to behave in this way should be significantly altered (as discussed in the following Section),³⁶⁵ but the courts should also give some meaning to the concise general statement, if for no other reason than to signal the value of its underlying aspiration. Doing so would involve encouraging the courts to remand rules that are too obtuse and disjointed and that assume too high a level of technical information for the average elite reader. The court has this authority under the APA's concise general statement clause.³⁶⁶ Although the interpretation of such an aesthetic-based test could vary across

362. This might not be practical without a modification of the current rules discussed later, however. Because a flat restriction on the number of communications can be circumvented through trade associations, subsidiaries, and the like, the best approach may simply involve requiring a complete record of all communications.

363. The proposal here does not suggest that the general public should be able to pick up the *Federal Register* and understand the EPA's perambulatory explanation of a proposed rule. It is intended to suggest, however, that an environmental lawyer or even a law student should be able to read a preamble and understand most of it, at least after spending a few hours with it.

364. *See supra* notes 131–37 and accompanying text.

365. *See infra* Part IV.B.

366. 5 U.S.C. § 553(c) (2006).

judicial panels,³⁶⁷ any damage resulting from this variability would be limited. After all, the court would be remanding the rule only for a clearer explanation, a demand that might annoy and embarrass the agency but should take no more than a month or two to satisfy.³⁶⁸

B. Bypassing Adversarial Constraints: Policy in the Raw

Even if the previously recommended reforms are implemented, agencies are still likely to focus most of their attention on comments that present a credible risk of judicial review and, as a result, may have less time to develop creative and more comprehensive solutions to regulation. As discussed in Part III, the courts, by requiring the agency to be responsive to all criticisms, effectively place the agency in a reactive role. Rather than focusing its energies on developing public-oriented regulatory policy, the agency finds instead that it must devote most of its analysis to preparing rules that can withstand fierce attack from an aggressive group of affected interests and respond to the flood of information loaded into the system by these same groups.³⁶⁹

Unlike the reforms presented in the previous Section, the proposal presented in this Section attempts to address the problems created by information capture not by reinforcing adversarial processes, but by circumventing them, at least at an early stage of policy development.³⁷⁰ Specifically, this policy-in-the-raw reform requires the agency to be largely, if not completely, insulated from stakeholders and political input during the embryonic stage of the development of its regulatory proposal. Although affected parties

367. Such a test would require, for example, that the basic thrust and requirements of the rule be discernable from the preamble and that important passages (like the significant changes from the proposed rule) be comprehensible to those who otherwise lack specialized knowledge.

368. The biggest problem with this reform is that it suggests that the courts only require a succinct statement at the final rule stage, a point at which such a demand may be the least helpful to stakeholders. To remand a rule for lacking a "concise general statement" at the proposed rule stage, however, would necessitate an entirely new notice-and-comment period, which could pose a hardship on the pace of rulemaking and invite more strategic use of the requirement by those interest groups that benefit from delay.

369. *See supra* notes 153–58 and accompanying text.

370. *Cf. Stewart, supra* note 6, at 1807 ("The only conceivable way out of the labyrinth would seem to be a new and comprehensive theory of government and law that would successfully reconcile our traditional ideals of formal justice, individual autonomy, and responsible mechanisms for collective choice, with the contemporary realities of decentralized, uncoordinated, discretionary exercises of governmental authority and substantial disparities in the cohesiveness and political power of private interests. Such a conception may well be unattainable, and in any event will not be achieved in the foreseeable future.").

would become important later in refining and even rejecting the proposals developed during this period, they would become involved only after the agency has had the opportunity to frame and consider regulatory solutions free from their input and pressure.³⁷¹

Although the details are best left for a later discussion, the policy-in-the-raw proposal in broad strokes involves a two-step rule-development process. At the raw stage, a small team of highly regarded policy wonks from inside the agency would develop a pre-proposal. This team would start with the statutory mandate and sketch out a goal statement based on that text alone.³⁷² It would then work—essentially in complete isolation—to develop a pre-proposal that best accomplishes that goal.³⁷³ Unlike the current approach to rulemaking, this policy-in-the-raw stage would be led by an agency team that is completely unconnected with and ideally not even aware of stakeholder pressures, litigation concerns, or other legal risks associated with the rulemaking.³⁷⁴ Its deliberations would be shielded from all stakeholder input, including friendly guidance from staff in the general counsel’s office or from politically appointed officials. The team would also be free to approach the proposal in whatever way it sees fit. There would be no requirement that it use analytical tools like cost-benefit analysis, formal alternatives analyses, or other forms of impact assessment, although the team would be free to develop or use these analytic tools if it felt that doing so would be helpful and consistent with the statute’s goal.

The pre-proposal developed by this team would be subject to peer review or, as appropriate, input from a Federal Advisory

371. Cf. Rubin, *supra* note 119, at 157–63 (advocating for insulating the agency from stakeholder pressure by the standard of review—an instrumental rationality standard—rather than actually isolating the agency staff, as proposed here).

372. This is similar to the “goal statement” urged by Professor Rubin, although it is more preliminary and is not vetted through interested parties. *See id.* at 163 (“A new APA should require that a document published at the time the agency decides to proceed with rulemaking explicitly state this goal before any effort has been made to determine the means by which the goal should be implemented.”).

373. *See, e.g.*, Holly Doremus, *Scientific and Political Integrity in Environmental Policy*, 86 TEX. L. REV. 1601, 1644–46 (2008) (advocating “limit[ed] contacts between political appointees and nonmanagement career technical staff during the technical stages of regulatory development” to improve the integrity of science used for policy).

374. *See, e.g.*, Thomas O. McGarity, *The Internal Structure of EPA Rulemaking*, 54 LAW & CONTEMP. PROBS. 57, 70–73 (1991) (discussing how the EPA initiates a rulemaking and describing the composition of the initial “workgroup” that drafts the first proposal, which can include agency lawyers who may invoke legal considerations at an early stage of proposal development).

Committee Act (FACA) advisory group comprised of a mix of policy analysts and other specialists (but not stakeholders). The team would have the option of using the comments, suggestions, and questions raised during this review process to modify the pre-proposal, but it would be under no obligation to do so. Any modifications would be wholly at the agency team's discretion, and there would be no risk of judicial reprimand if the team chose to disregard suggestions made during this review.

The final pre-proposal, along with the comments of peer reviewers or the FACA committee, would be published on the Internet and available in hard copy. The preliminary proposal would be expected to be detailed and comprehensive, yet also accessible to regulatory experts who lack specialized knowledge about the issues addressed by the rule. The agency team members responsible for preparing the pre-proposal would operate much like academics—producing innovative yet effective proposals and enjoying reputational rewards based on the quality of their work. Particularly good teams or team members might find their visibility among policymakers and academics to be enhanced when they produce particularly inspired proposals. Ideally, the teams would attract high-caliber candidates both because the unconstrained nature of the work would be inviting and because there would be opportunities for individual accolades for work well done. To maintain these reputational benefits, the team would be encouraged to develop pre-proposals that are detailed, thoughtful and well supported. Poor analysis, half-baked innovations, or proposals with little support could lead to embarrassment within the policy analysis community.

Establishing an initial raw stage for regulatory policy development would counteract information capture in a number of subtle but important ways. First, the proposals developed as part of this process would likely be much more accessible to a wide group of affected parties than existing proposals. Unlike the existing policymaking process, which is rife with incentives to inflate information costs (from the perspective of some stakeholders, the more esoteric the rule the better), proposals developed in the raw would be designed to engage a broad audience. After all, reputational advantages will not accrue to team members if very few individuals understand the rule. Pre-proposals developed in the raw therefore will be written to give interested parties an appreciation of the nature of the rulemaking project, its likely direction, and how it might fit with other rules. Moreover, because the implications of the rule will

be easier to understand, public interest groups will be better able to highlight the value of their engagement for donors and members. A more accessible and coherent proposal also provides a benchmark or point of reference against which future (potentially more complex and detail-oriented) proposals can be compared and evaluated. This is a particularly valuable benefit in light of the fact that the complex proposed and final rules discussed earlier seem inaccessible in part because there is no clear point of entry for developing an understanding of the relevant issues.

Second, policy in the raw allows an agency team to innovate in ways that are decoupled from the participatory and litigation processes. This creates the opportunity for more candid and creative analysis. Similar to the proposal advanced by Professor Rubin for an “instrumental rationality” approach to rulemaking, the agency would focus on the policy puzzle at hand during the raw stage of policymaking, rather than on simply anticipating and reacting to what the stakeholders might say about its proposal.³⁷⁵

Finally, the raw period of policy development provides the agency with a litigation-free zone for conducting meaningful alternatives assessments on competing proposals. Currently, agency lawyers and political advisors appear to exert a heavy hand in the agency self-assessments required under Executive Order or by statute. These advisors rightfully worry that an agency’s honest evaluation of its proposal against alternatives may actually put its preferred policies at risk by exposing important advantages of

375. As mentioned in note 372, *supra*, Professor Rubin also proposes a policymaking process that strives to decouple the process from stakeholders by basing judicial review on “whether the rule that the agency has promulgated is likely to achieve its stated goal.” See Rubin, *supra* note 119, at 163. Professor Rubin sees this instrumental rationality goal operationalized, at least in part, through cost-benefit analysis. *Id.* at 159–61. Unlike Professor Rubin’s approach, however, the judicial review approach proposed here is more deferential to the agency on the substance of its rule, and the pre-proposal is insulated from stakeholders entirely and is also largely free of any threat of judicial review other than ensuring that the raw proposal is completed. Although both approaches seem eager to provide the agency with more incentives to develop comprehensive, intelligent, and innovative policies, this proposal is concerned exclusively with the problem of information capture. By contrast, because information capture is not among the evils that Professor Rubin considers, *see id.* at 162–63, his proposals are largely insensitive to the danger—and some facets of his proposal may risk exacerbating these problems, at least for the subset of rules susceptible to information capture. *See, e.g., id.* at 164–65 (recommending early involvement of stakeholders and harder look by courts, which together could perpetuate information capture in at-risk rules); *see also id.* at 164 (“There is evidence . . . that the influence of special interests on government decision makers is less disproportionate than is often assumed, and the multiplicity of voices may ultimately counterbalance each other.” (footnote omitted)).

competing approaches that might otherwise have gone unnoticed by opponents.³⁷⁶ Conducting analyses in an environment free from these political and litigation pressures at the very early stages of a rulemaking should result in a more meaningful assessment of alternatives.³⁷⁷

The crux of this proposal is to establish an early, unconstrained period of policy development during which the agency can develop one or more basic proposals for addressing the regulatory problem at hand. How this pre-proposal then fits into the existing rulemaking process warrants further discussion. One approach would be to use the pre-proposal as the principle background document upon which the proposed rule is based. A team of EPA staff (including representatives from the program office and the general counsel's office) would ground the proposal in light of various interest group inputs and legal constraints. This team could alter or even reject the pre-proposal in its entirety in the development of the proposed rule. To afford the pre-proposal some stature and significance, however, there should be a presumption that the pre-proposal would form the basis for the proposed rule. The agency would need to explain in the preamble of its proposed and final rules why it chose to deviate in significant ways from the pre-proposal. These explanations, in turn, would be subject to judicial review.

It bears mention that this policy-in-the-raw recommendation parallels negotiated rulemaking but takes essentially the opposite tack. In negotiated rulemaking, the agency identifies the major interested parties and meets with them to negotiate a proposed rule.³⁷⁸ Here, rather than looking to the stakeholders to assist in developing a regulatory proposal, the policy-in-the-raw approach eschews the use of stakeholders during the initial stages of policy development unless specific information is needed. The hope is that policies developed in the raw will be more complete and targeted than proposals that are developed based on the idiosyncratic concerns of selected interest

376. Wendy Wagner, *The Clean Air Interstate Rule RIA: Advocacy Dressed Up as Policy Analysis*, in REFORMING REGULATORY IMPACT ANALYSIS, *supra* note 82, at 56, 59–60 (detailing these litigation-based incentives in the RIA process).

377. *See, e.g.*, Harrington et al., *supra* note 82, at 224–25 (proposing that RIAs be done somewhat earlier in the process to ensure that they provide a meaningful analysis of alternatives).

378. *See* 5 U.S.C. § 561 (2006) (establishing a framework for the conduct of negotiated rulemaking).

groups.³⁷⁹ The resulting proposal should also be much clearer and more accessible with respect to the logic and assumptions underlying the rule.³⁸⁰ Likewise, the contribution the rule makes to the protection of health and the environment should be more explicit and easy to understand.

C. *Competition-Based Regulation*

Thus far, this Article's reforms have addressed the substantive implications of information capture: the lack of balanced oversight and engagement in complex rules and the inability of the agency to think comprehensively or creatively about the regulatory task at hand. This final set of reform proposals attempts to address the more deeply embedded ways that information capture may take hold of the process itself. Noble goals of greater administrative transparency can actually be surreptitiously used to facilitate information capture.³⁸¹ Moreover, as information continues to be loaded into the system, the system may become so bloated and overwhelmed that it is difficult to reverse the information avalanche.³⁸² The reforms in this Section attempt to target these problems—namely, the potential for abuse of open government provisions and the information avalanche that can result.

Rather than engage the missing interests more adversarially or impose filters on participants' regulatory communications, this final reform attempts to scramble the incentives of the most engaged and powerful interest groups and pit these otherwise like-minded interests against one another. Specifically, the proposal takes a divide-and-conquer approach to rectifying more entrenched forms of information

379. Judge Wald, for example, expresses concern about the consensual nature of negotiated rulemaking and the after-the-fact nature of the agency's explanation for a proposed regulation: "The consensus could also be pure political logrolling . . . rather than rational decisionmaking." Patricia M. Wald, *Negotiation of Environmental Disputes: A New Role for the Courts?*, 10 COLUM. J. ENVTL. L. 1, 22 (1985).

380. Concerns have been raised about the public accessibility of negotiated rulemakings. See, e.g., William Funk, *When Smoke Gets in Your Eyes: Regulatory Negotiation and the Public Interest—EPA's Woodstove Standards*, 18 ENVTL. L. 55, 79 (1987) (expressing concern over the EPA's preamble being an "after-the-fact rationale attempting to justify decisions made by the negotiating committee for reasons we can never know"); *id.* at 88–89 (discussing the adverse impact on public participation resulting specifically from the negotiation of scientific information and methodology); Derek R. McDonald, Note, *Judicial Review of Negotiated Rulemaking*, 12 REV. LITIG. 467, 477–78 (1993) (discussing the concern that the public is not adequately included in negotiated rulemakings).

381. See *supra* Part III.B.2.

382. See *supra* Part III.B.3.

capture. By creating an adversarial climate within the most vigorous and unified coalition, the reform essentially creates fresh incentives for talented and resourceful advocates to whittle down the record to a manageable size and to use transparency and open government not to overwhelm regulatory participants but to better isolate problems with competitors' positions.

Competition-based regulation, like pluralism, thus relies on a somewhat unconventional adversarial process to address the problems of information capture.³⁸³ But unlike the reforms for reinvigorating pluralistic engagement in proposed rulemakings presented previously, ensuring a diverse mix of affected parties is not important to this reform. Rather, this proposal focuses instead on dividing and conquering those parties that have successfully used information capture in the past by creating competition among them.³⁸⁴

Competition-based regulation is easiest to understand in the context of product licensing. In current product licensing, the EPA determines which products are not "unreasonably unsafe" (or the equivalent) through complex and generally unopposed processes that often involve only the manufacturers of the product at issue. Because these manufacturers may dominate the procedures, the EPA's deliberations may not benefit from pluralistic oversight. As a result, there is a risk that the agency's decisions will diverge from both

383. Information specialists may have other organization-based or process-based suggestions for how past information excesses can be brought under control in the future. If a rule remains highly complex and opaque, even after implementation, then information audits may be used to clarify or sort the issues according to their significance and to reduce unnecessary ambiguities or technical details in the future. These systems may also help organize the constant influx of administrative materials by, for example, sorting documents and inputs according to their materiality, reliability, and relevance with different electronic signatures for high-, medium-, and low-quality filings based on these factors (material, reliable, relevant). Regardless of how this is accomplished, the point here is simply that these types of informational economics should be brought to bear with some force on the administrative state. As Professor Simon observes: "When we find the right way to summarize and characterize that information—when we find the pattern hidden in it—its vast bulk compresses into succinct laws, each one enormously informative." SIMON, *supra* note 19, at 227. Although it is beyond the scope of this Article to identify how these types of informational management schemes might be implemented, it appears that the capacity to accomplish this type of informational downsizing and filtering, even for existing rules, exists and could prove helpful.

384. See Wendy E. Wagner, *Using Competition-Based Regulation to Bridge the Toxics Data Gap*, 83 IND. L.J. 629 *passim* (2008) (providing a fuller version of this proposal); see also DAVID DRIESEN, *THE ECONOMIC DYNAMICS OF ENVIRONMENTAL LAW* 153–61 (2003) (introducing the idea of a competitive-based private claim available to first-movers to recoup costs associated with environmental innovation).

statutory goals and what rigorous factfinding might otherwise reveal due to information capture.

The EPA does not have the resources to review these past decisions, and even if it did, it seems unlikely that reviews would involve participation from a diverse set of interest groups. The alternative here attempts to devise ways to encourage the regulated parties themselves to challenge licensing decisions that are too lenient. Specifically, the manufacturer of a green product could file a petition alleging that a competitor's product, which occupies the same market niche, is much more hazardous in a variety of ways and therefore should be regulated more stringently. The types of regulatory requirements that might be imposed on this inferior competitor could range from labeling requirements (that highlight the risks associated with using the product relative to superior products) to actually banning the inferior product if its risks are unreasonable in light of the alternatives. The process would be initiated by a petition filed by the green company and would involve an adjudicatory hearing in which the manufacturers would battle each other on the facts. The EPA would make a final decision on the merits and issue regulations accordingly.³⁸⁵

A similar process might be established for reviewing pollution control standards. A green company could petition the EPA to set more stringent limits for discharges from a category of industry because of the ready availability of green methods and technologies that significantly reduce pollution below permitted levels.

One of this approach's key attributes is that it provides incentives for adversaries to dredge up useful information regarding optimal environmental solutions that might otherwise be lost in the mounds of undigested regulatory filings. By relying on manufacturers to root out information on inferior competitors, and providing a forum for establishing more stringent regulation of those competitors, the proposal unleashes energy that those outside the competitive process, including regulators, will have difficulty duplicating.³⁸⁶ An added

385. EPA regulators would adjudicate these competitive claims through adversarial hearings in formal rulemaking fashion. If a product is certified as superior, the certification could be useful not only to consumers but also to insurers and investors, and might even ward off tort litigation by indicating that the manufacturer produced at least a "reasonable alternative design." See RESTATEMENT (THIRD) OF TORTS: PRODUCTS LIABILITY § 2(b) (1998).

386. Undoubtedly, manufacturers will sometimes overstate the risks of competitor products, but adversarial adjudications help protect against this overstatement by providing competitors with a full opportunity to rebut or disprove allegations of risk.

benefit of this approach is that market forces will help triage the regulatory process. Competitive energy will focus on the worst products and processes (for example, those for which green alternatives have the greatest competitive edge). The striking similarity of this proposal with recent proposals for competition-based reform of the patent system—in which non-patent holders could file petitions to cancel a patent as invalid—attests to policymakers' increasing recognition of the valuable role market forces can serve in supporting regulatory decisions and processes.³⁸⁷

The petition process could also be open to any party willing to bring a case against an inferior product, not just the manufacturers or other regulated parties who stand to benefit financially. Thus, if industry proves reluctant to engage in the process but there are established differences between products, public interest advocates could press the charge in their stead.³⁸⁸ In these settings, in which the petitioner is not the company standing to profit monetarily from the claim, the petitioner could also be awarded attorney fees for substantially prevailing, as well as a possible bonus fee to be paid at the discretion of the superior company as an expected but not mandated thank you.³⁸⁹

387. See Patent Reform Act of 2007, H.R. 1908, 110th Cong. § 321 (2007) (providing that anyone “who is not the patent owner may file with the Office a petition for cancellation seeking to institute a post-grant review proceeding to cancel as unpatentable any claim of a patent”); see also COMM. ON INTELLECTUAL PROP. RIGHTS IN THE KNOWLEDGE-BASED ECON., NAT'L RESEARCH COUNCIL, A PATENT SYSTEM FOR THE 21ST CENTURY 96–97 (Stephen A. Merrill, Richard Levin & Mark B. Myers eds., 2004) (“The committee recommends that Congress seriously consider legislation creating an Open Review procedure, enabling third parties to challenge the validity of issued patents on any grounds in an administrative proceeding within the USPTO.”).

388. See Wagner, *supra* note 384, at 643–44 (discussing an example based on asphalt sealant).

389. Although the competitive-based approach to regulation targets existing products and regulations, it might also be available to work prospectively in cases in which regulated participants are well established and new regulations—perhaps climate change or nanotechnology—are coming along the pike. In these settings, if the agency has several alternative proposals that emerge from its rulemaking process, there could be a brief six-month or one-year window during which competitors could advocate for the most ambitious proposal to establish a market edge. Some of this adversarialism may emerge (or be squelched) in comment periods; but by attaching a clear reward to the claim or position, it may draw competitors out of the closet and turn them against one another.

CONCLUSION

A commitment to open government and equal access is appropriately central to the administrative process, and these objectives remain the continuing focus of legislators, administrators, and the courts. The assumption that these goals alone will ensure accountable government, however, has generally been taken for granted; and over time, it has become increasingly evident that significant design flaws are emerging in the system that threaten to undermine these objectives. Chief among these design flaws is administrative law's obliviousness to the impact that excessive information can have on the effective functioning of the system. There are no provisions in administrative law for regulating the flow of information entering or leaving the system or for ensuring that regulatory participants can keep up with the rising tide of issues, details, and technicalities. Indeed, a number of doctrinal refinements intended originally to ensure that executive branch decisions are made in the sunlight inadvertently create incentives to overwhelm the administrative system with information. Rather than illuminating the process, these reams of comments and reports replete with inaccessible techno-jargon create a dark cloud that obscures the decisionmaking process and ultimately undermines pluralistic oversight, productive judicial review, and opportunities for intelligent agency decisionmaking.

A number of public-benefitting rules emerging from the regulatory state may be influenced heavily by only one set of interests—typically regulated parties—with little to no counterpressure to ensure that the public interest is represented or protected. The result is information capture: embedded participatory imbalances that emerge from the administrative legal system's infinite tolerance of and even tendency to encourage information excess. Information capture allows strategic parties to effect considerable control over the agency's priorities and the substance of regulatory decisionmaking. Even more insidious, under the right circumstances this information capture occurs even if the dominant participants are not trying to manipulate the system.

Information may have been a scarce commodity in the 1940s when the foundation for the administrative state was being laid, but this is no longer the case. Existing administrative processes suffer from too much rather than too little information. Other areas of law have developed rules that explicitly discourage parties from playing

strategic games with information and encourage communications between participants to be productive and efficient. It is past time for the administrative system to take note and change its ways.