

THE DIGITAL MIGRATION: TOWARD A NEW TELECOM ACT

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On February 14, 2005, the University of Colorado School of Law welcomed then-Federal Communications Commission Chairman Michael Powell to present a keynote address at the Silicon Flatirons Telecommunications Program Symposium, "The Digital Migration: Rewriting the '96 Telecom Act." After being introduced by then-Colorado Secretary of Innovation and Technology Leroy Williams, Chairman Powell was asked to offer his remarks in the context of a talk-show format with Professor Phil Weiser, his former Department of Justice colleague, as the host. At the close of his remarks, Chairman Powell participated in a question-and-answer session also moderated by Professor Weiser. What follows is an edited transcript of a talk-show-like exchange between Chairman Powell and Professor Weiser, as well as the question-and-answer session.

INTRODUCTION

Secretary Williams: Thank you, it is great to be here. This is my second time having the opportunity and pleasure to introduce Chairman Powell, someone whom I highly respect and look up to. He has done just a tremendous job as a chairman at the FCC. Most people do not even understand the positive impact that he has made in our lives.

To begin, we here in Colorado are fortunate because we are on the leading edge of technology. We certainly have a strong presence in the telecommunications arena. It is unfortunate that I read in the paper this morning about Verizon winning the bid against Qwest in the MCI deal.¹ Had MCI come up here and taken a look at the scenery, they might have changed their mind. As a native passionate about Colorado, we do hope things work out with Qwest; we have been very good partners with

* This article was adapted from a speech and question-and-answer session delivered by FCC Chairman Michael K. Powell at the Silicon Flatirons Symposium on "The Digital Broadband Migration: Rewriting the Telecom Act" held at the University of Colorado School of Law on February 14, 2005.

1. Matt Richtel & Andrew Ross Sorkin, *Verizon Agrees to Acquire MCI for \$6.6 Billion, Beating Qwest*, N.Y. TIMES, Feb. 14, 2005, at A1.

Qwest and our telecommunications community.

We are one of a few states that have actually begun to close the digital divide. We have deployed broadband services in all sixty-four counties,² which is not an easy economic proposition given the size of Colorado and the complexity of the Rocky Mountain geography. We are excited about the results. If you go down to the San Luis Valley, they actually have DSL.³ The San Luis Valley is a remote area with very low population density. The economics and demographics would suggest they would not see DSL for a long time. It was our partnership with Qwest and other telecommunications providers that made it possible for San Luis Valley and other rural parts of Colorado to have DSL service.

What best describes Chairman Powell is that he just flat out *gets it*. We owe a lot to his abilities to have conversations with Congress, talking about and promoting policies, breaking things down so people understand what's important, working with academia, driving competition, and promoting innovation to continue the investments in technology.

His recent statement highlights his tenure as chairman:

[We] worked to get the law right in order to stimulate innovative technology that puts more power in the hands of the American people, giving them greater choices that enrich their lives. Evidence of our success can be seen increasingly in the offices, the automobiles and the living rooms of the American consumer.⁴

He consistently advocated a free market approach to broadband and VoIP, which often put him at odds with two Democratic Commissioners and a fellow Republican.⁵ He argued for greater competition between cable and DSL rather than continuing his predecessor's approach of forcing telecommunications companies to accommodate rivals by signing money-losing deals.⁶

In my own tenure in the government, often it is easy to walk a delicate line where you do not raise controversies and push the envelopes.

2. For information on Colorado's state-wide multi-use network that brings broadband communications to every county seat, see <http://www.mnt.state.co.us/>.

3. Digital Subscriber Line service, a type of broadband platform that utilizes the copper wires of the telephone network.

4. Press Release, Fed. Comm'n's Comm'n, Statement of FCC Chairman Michael K. Powell on Leaving the Commission (Jan. 21, 2005), http://hraunfoss.fcc.gov/edocs_public/attachmatch/DOC-256206A1.pdf.

5. Declan McCullagh & Ben Charny, *Mixed Legacy for FCC's Powell*, CNET NEWS.COM (Jan. 21, 2005), http://news.com.com/Mixed+legacy+for+FCCs+Powell/2100-1033_3-5545030.html.

6. *Id.*

Chairman Powell has certainly raised controversies and pushed the envelope through his philosophy and his policies. We thank you, Chairman Powell, for taking on those battles and leading the free market drive.

During this conference last year, Chairman Powell and I had a brief conversation about new maturing technologies and their mass market potential to create a convergence for 100% broadband availability. Six weeks later, the President announced his 100% broadband availability initiative. While I do not know if that was attributed to Colorado, I think we should take some credit.

Finally, I listened to a speech by Chairman Powell last year on ethics and integrity which had tremendous take-aways for the students and the audience. He clearly comes from a family heritage of the utmost integrity. Again, I want to thank you for all that you have done for the telecommunications and high tech industries. With that, here is Chairman Powell.

I. DIGITAL MIGRATION

Professor Weiser: One thing people may not know is that Chairman Powell is a big fan of the Charlie Rose Show.⁷ Actually, he may not know that. But in this version of the show, I get to take on the persona of Charlie Rose. The idea here is to underscore his agility both in regulatory philosophy and in mind. We will go through a series of questions that will capture the theme of the conference, and then open up questions to the audience.

To start, when you first came here in Fall 2000, you looked out in the broad frontier of the mountains and made an analogy to the migration of ancient peoples.⁸ You analogized ancient peoples who came through straits and faced new challenges to what you foresaw as the digital migration. Where are we in this migration?

Chairman Powell: To paraphrase Martin Luther King, we may not be there yet, but I have been to the mountaintop and seen the Promised Land.

Professor Weiser: Was that in South Korea?

Chairman Powell: I thought that was in Colorado. We have breached through and established a beachhead on the other side of the digital migration. People, ideas, and products are pouring through that breach rapidly, and it's expanding. Since I gave that speech four or five years ago, I have seen the TiVo, the iPod, the Blackberry. I have seen

7. See generally THE CHARLIE ROSE HOME PAGE, <http://www.charlierose.com/>.

8. Before delivering his "Great Digital Broadband Migration" speech to the Progress and Freedom Foundation (in its final form), Chairman Powell delivered those remarks at the University of Colorado. See <http://www.fcc.gov/Speeches/Powell/2000/spmkp003.html>.

the arrival of digital cable service, an explosion of DSL provisioning, and satellite-delivered local communications. I have seen the arrival of the Xbox, Xbox LIVE, Playstation 2, PSP, and on and on. Cell phones that are basically your new electronic Swiss army knife.

If you have any doubt that the basic paradigm to digitization, digital technology, and digital migration are in force, then you are not paying attention to the children in your living room. That generation is unquestionably and irreversibly committed to that transformation and everything that transformation entails. It is a passion of mine that the seeds of these things have been planted and are blossoming. I think 2005 and the future are extraordinarily bright.

Nobody debates this anymore. We did this, Phil, as an academic exercise. I hear people in this room saying this is all very academic. It all starts academic and I have been criticized for years that this won't happen or that I am in an ivory tower. Nobody is having this discussion anymore. Companies are radically looking for their movement, their play, and their transformation. Consumers are adopting. Digital migration is not an open question. The only question is how fast it will get to the new Promised Land.

II. SPECTRUM POLICY REFORM

Professor Weiser: So the next time you spoke here, about a year later, you spoke about the problems with the spectrum regime we have.⁹ Where companies have licenses to use spectrum, they would basically come to the FCC, hat in hand, and say "may I do this?" You noted that this was a very restrictive and stifling regime for innovation. So you launched a new initiative, Digital Broadband Migration Part II, to reform spectrum policy. Reflecting back, where are we along that path?

Chairman Powell: I am pretty bullish about this, too. This is one of the most remarkable examples of an agency actually developing a consensus to establish a vision to build, develop, distribute, and execute a blueprint. This has been the success story of the Spectrum Policy Task Force¹⁰ and an initiative launched at this conference. We knew that spectrum policy was broken. The command-and-control that was governing spectrum management could not guarantee highest and best use of spectrum in a fast moving, innovative, and driven space.

Some very talented staffers at the FCC took charge of the mission. I remember very clearly saying to them, Don't come back with anything

9. Michael K. Powell, Chairman, FCC, Broadband Migration III: New Directions in Wireless Policy, Remarks at the Silicon Flatirons Telecommunications Program (Oct. 30, 2002), <http://www.fcc.gov/Speeches/Powell/2002/spmkp212.html>.

10. See generally Fed. Comm'n's Comm'n, About the Spectrum Policy Task Force (last visited Oct. 5, 2005), <http://www.fcc.gov/sptf/>.

mee, I don't want to see it. I don't want to see incrementalism. I don't want to see repackaging of the same old stuff we have been doing for the last twenty years. They did not shirk from their mission at all. They produced an outstanding piece of government work about changes and the future, some of which we laid out at the conference here.

We have been marching relentlessly down this path ever since we put out this vision. Spectrum reform means a lot of things to a lot of people. But in a very short time, we have eliminated our official spectrum cap constraints on spectrum in the market.¹¹ We have introduced secondary markets and leasing policies that allow technology to be moved in a free market without coming back to the government for permission.¹²

If you had asked five years ago if you could you get away with creating secondary markets, you would have been told that you were crazy. The public interest stewards of spectrum would never let a private entity sell and transact spectrum in secondary markets with the blessing of the government. But we do that freely today. Today, it is more common than not that spectrum comes with enormous flexibility of use. We may set interference parameters,¹³ market area,¹⁴ or geographic regions,¹⁵ depending on how we choose to license a spectrum. But I don't remember the last time we said anything about what to do with spectrum.

At the FCC, we rarely ask, "What's this spectrum for?" We decided that's none of our business and I used the following analogy: It's like a driver's license—don't speed, don't kill anybody, what color of car you drive is none of my business. This actually is a paradigm that is used in the allocation of spectrum at the FCC everyday now.

So we have spectrum flexibility and secondary markets. But we don't have spectrum caps. Additionally, we have explored the possibilities of public benefit in lots of models. For Wi-Fi, which to the used junk spectrum for baby monitors and microwave ovens, it's pretty remarkable what's being done with it. What a radical notion it is to say that Mike Powell, not Verizon, not Sprint, owns this spectrum in his house. I can go down to the Circuit City and buy a box for \$70, throw it in my house, and create a wireless network at a very low cost. That's the democratization of technology and power.

11. See 2000 Biennial Regulatory Review Spectrum Aggregation Limits for Commercial Mobile Radio Services, *Report & Order*, 16 FCC Rcd. 22,668 (2001).

12. See Promoting Efficient Use of Spectrum Through Elimination of Barriers to the Development of Secondary Markets, *Second Report & Order & Order on Reconsideration & Second Further Notice of Proposed Rulemaking*, 19 FCC Rcd. 17,503 (2004).

13. *Id.* at 17,546 ¶ 86, 17,561-62 ¶ 119, 17,563-64 ¶ 126.

14. *Id.* at 17,517 ¶ 26, 17,519 ¶ 27, 17,522 ¶ 36.

15. *Id.* at 15,515 ¶¶ 21-22, 15,516-19 ¶¶ 25-27, 17,532 ¶ 59.

Things like this pop up all over the country at the most unbelievable rate. In my 8 years, every time we looked at one of these things, we had technologists and lobbyists come in and tell us that this could never be used so don't do that. They would say satellite could never deliver signal into local markets, so don't do that. They would say, Don't ever do Wi-Fi because you could never get a last mile solution out of that technology. Every time, some innovator blows these people off the map.

Last time I was in Colorado, I met three guys who in three weeks with forty thousand dollars had a 54 Mbps blanket network over Aspen shooting signals nine miles. Don't tell an American entrepreneur what he cannot do, and we have learned to be aggressive about letting people try. I am very proud of the spectrum policy. There is a lot more that can be done and it is in a remarkably healthier place than when we set out on this mission.

III. "NET FREEDOM" PRINCIPLES

Professor Weiser: When you spoke here last year, you spoke about the "Net Freedom" principles. You have reiterated those principles more recently in connection with VoIP and the potential for discrimination between service providers. Why is this issue important to you? What do you envision the FCC doing down the road, such as a FCC formal policy on this issue?

Chairman Powell: I have read in the papers that I am a rabid believer in laissez-faire, which makes me laugh because I don't think anybody truly believes in laissez-faire. I think anybody who is truly committed to market principles knows that markets only work if you are committed to the rule of law. Markets only work if, in the rare instances when there is a risk of market failure, the government is prepared to act, and act quite brutally. The presumption is that if someone is cheating, the government kills it. This is the competition policy under the antitrust model. In other words, I don't think the government can champion moving our entire communications architecture to an Internet Protocol data space and then stay mum about genuine risks to the viability of that regime through anti-competitive behavior.

Being neutral is the healthy way that is the most faithful to the market and technology. It is also the least governmentally intrusive, and the one that best promotes innovation. What's essential to realize the dream of the Internet is for the government to just hang out there in the periphery of the Internet space and assure that providers wouldn't try to hurt the consumers. A willing consumer can then make a connection with a willing provider anywhere in the world.

So these principles are elegant, but what about a rule? The government has to be very cautious about when it moves the policy to a

rule because it is a lot easier said than written. When the writing starts, all kinds of mischief begin: the definitional issues, at what technical point to enforce a regime, who is allowed to access it, and who is not. And you have to be sure you have a problem—this may sound really radical and novel—you should not have a solution until you have a problem. Before the government opens up a regime, you ought to have good evidence of how that problem presents itself and that there is actually a problem.

Another point people talk about is that regulators like to really swagger and act tough. But the government should not bring companies to their knees. I am a big believer in aligning interests in regulation, which means you should define the public interest and understand the private interest of the providers. Then see if you can develop policies that align them so that concurrently the government is actually going with interests. My experience has been that when a company is diametrically opposed to what the government is trying to shove down its throat, you will try to do it in court forever. And you almost never win because as soon as you stop one thing, the companies find another way if they are so sufficiently motivated to cheat.

What makes a policy last for decades is when the policy begins to be part of the culture of the company, the market, and the processes. I worried a lot more about cable companies' impulses on this several years ago than I do today. I actually believe that the cable companies are getting smarter about what the Internet is, getting better at understanding of what kind of opportunities it provides, and getting a clear picture of what their consumer would accept. I believe we are beginning to successfully create a culture knowing what the Internet is and is not. The Internet is not a place for a company to strip a consumer's alternative. There are a lot of things everyone told me that carriers would stop doing, but they haven't. I hope there won't be a need for a rule. But trust me, if there is need for a rule, this would be an area I would move into.

IV. BROADBAND PLATFORMS

Professor Weiser: I hope you will continue on, because the spirit of your direction is important and inspiring. One of your directions has been that it's really important that we get more broadband platforms. A quote from you is that "magical things start to happen when you get to three." Why do you think that and what are you doing to promote additional broadband platform entrants?

Chairman Powell: Yeah, I do say stupid things like that. Then I have to explain it.

Professor Weiser: Comes from reading all the Harry Potter books, I guess.

Chairman Powell: Right, we could be metaphysical here. There is something magical about three, isn't there? Everything from the Trinity to the Three Stooges. All right, we will leave this metaphor here and try something else.

Here is why I think three is important. One, it's a low plateau when duopoly is not enough. That does not mean duopoly sometimes isn't completely healthy from a competitive standpoint. Coke and Pepsi are a duopoly and they beat each other's brains out. But duopoly is not where your aspiration should stop. So "three" is a statement of vision—go farther and dare to want more than you know you can get. I am very confident we can get a lot more, so I never want to endorse the idea that two would be enough.

The other reason is that researchers have shown that the competitive dynamic gets a lot richer when you start to have three players. Collusion becomes harder and coordinated activities become harder. Someone always breaks ranks and pushes an innovation that threatens the others and forces the others to move. I won't recount all of the antitrust literature, but it is fairly well established that "three" is a special number in markets.

But here is why it is really magical for everything we have heard in this conference. It is important to remember what the market is. "Three" is a way to have the market discipline behavior rather than having the regulators do it.

If you want our broadband market to get healthy enough, competitive enough, and disciplined enough to lower the regulatory barrier, you should promote more platforms. The more platforms there are, the richer the competition and the better the innovation. Similarly, with more platforms, you can make a compelling case for less regulatory intervention, which in turn spurs more investments in innovation.

The FCC has a venture policy as follows: If you have an innovation or a new technology for broadband, you can have a meeting tomorrow and we will hear about what you plan to do. We will devote every resource we have. Sometimes it's nothing more than coming to your press conference, and I will go watch your new product trial in Kansas or Silicon Valley. I will talk to every newspaper that wants to talk about broadband and give a quote. We will drive with every ounce of our being to facilitate every opportunity for a new platform to exist. This is another area where the FCC deserves some rare commendation.

Whether it's Wi-Fi, WiMaX, broadband over power line, satellite delivered broadband, cable modem, or DSL, we have exhaustively tried to create as many platforms as possible. I am confident more than three of them will stay.

Professor Weiser: I guess what they say is, from your lips to God's

ears.

Chairman Powell: It's another one of the Trinities.

Professor Weiser: Exactly.

V. FCC REFORM

Professor Weiser: One of your prayers in taking over the FCC was to reform the institution itself: improving its expertise, raising its commitment to the rule of law, and moving in the direction of being more of an enforcement agency and less of a quasi-legislative one. How would you rate your success on this score and what would you recommend for the future?

Chairman Powell: I don't like this rate-yourself stuff, Phil.

Professor Weiser: At least I am not asking you to rate from one to ten.

Chairman Powell: Anyone who wants to sit in my seat needs to spend at least as much time talking about grand visionary policies as the actual management and stewardship of that organism. The FCC has two thousand amazing people. These are amazing people who work enormously long hours on very long and complicated stuff for very little money. Unlike some industries, these are people who could go work elsewhere. They are special. So, we took the management of the FCC very seriously. We decided that the FCC is an extraordinary institution, but it has a few flaws.

The FCC was an institution that was constructed and whose culture was built around one hundred years of a very mature industry. And it was constructed *for* that mature industry. For the better part of the FCC's history, there was only one phone company and a couple of broadcast companies. Only in modern times have we added wireless and these other things.

The FCC is fundamentally in a new place and needs a new culture. The FCC is also lawyer-heavy and lawyers are incrementalists. We are trained to be incrementalists and not do anything without precedent. We are conservative and avoid risk when possible. This is not the splashy stuff of Internet vision. We had to radically change the culture and create an institutional commitment to look forward instead of backward. When I first arrived at the FCC, I felt like we were reacting to a crisis 95% of the time. Now, we still have to react to things, but for the first time we have things on our agenda because we proactively want to do those things. And those things are forward looking.

The best thing we have ever done was building our own University. Every employee is required to participate in the University. Your performance appraisal includes an employee development plan and you have to take classes on technology. You have to teach if you are a senior

person. These courses are amazing. Now we also have an online version and people can take classes at home. We have regulators from around the world asking me if they can send their people to the classes. We invite Hill staffers to come, so we can all try to develop a common knowledge and intellectual path.

What the University does for morale, commitment, and excitement about new stuff is enormous. The FCC is a wonderful place to work right now. It is a wonderfully exciting place that looks forward rather than backward. On that score, we get an A.

As to enforcement, you heard my philosophy that you cannot be a credible market person if you do not believe in enforcement. We are the only Commission in thirty years that has blocked a media merger.¹⁶ We did not condition it, we just said no, and pulled the trigger even though nobody believed we would. By the way, we went ahead of Justice, something I was particular proud of. We have blocked a lot of things and gone after very big companies for very big amounts of money. That's an important legacy.

VI. FCC DECISION MAKING

Professor Weiser: Let's follow up on that. One of the points the last panel discussed was that the FCC has become less deliberative and constructive in its decision-making and there is more partisan infighting. To what extent is that true, and is there a way that future Commissioners can try to get to the judicial ideal? One suggestion is to have just one chairman. Are there ideas that you have thought of that could help this process?

Chairman Powell: This is actually a really hard question because there are many more pieces to it. It's not a simple matter of who you put on the Commission. And it's not a simple matter of a sunshine act or any quick fixes. Some of the reasons are inherent in the transformation going on in the market. I am not sure whether there is anything that can be done about it. Legislative activity is inherently political.

As the Telecommunications Act¹⁷ turns gray and positive law does not squarely answer important questions, the FCC's place on the spectrum is definitely moving more toward being legislative. We are increasingly being asked to answer questions that are not really questions, but are the identification of issues. The FCC is in essence being asked to write the new rule. Even when it is interpreting a rule in a statute, rarely is the statute offering anything clear. So even if you are just fighting over

16. Application of EchoStar Communications Corp., General Motors Corp., and Hughes Elec. Corp., *Hearing Designation Order*, 17 FCC Rcd. 20,559 (2002).

17. Telecommunications Act of 1996, Pub. L. No. 104-104, 110 Stat. 56 (codified in scattered sections of 15, 18 and 47 U.S.C.).

ambiguity, you are really writing new law.

To follow the open administrative process when outcomes affect a billion-dollar industry and many consumer groups, you have to let people join meetings and do things in the open. All these interrelate to make the agency heavily legislative in a way that makes you uncomfortable. This is beginning to be a warning sign to the Congress because something has to be changed. Something has to be changed because more and more of the agency is being forced to do the Congress' job and the organic statute is losing its applicability and relevance.

The other interesting thing is that the FCC needs to shut its processes down tighter because our *ex parte* process is out of control. It is out of control because people feel they can call you and ask what you think even on the eve of a decision. By the way, many in the audience are as much to blame as we are because lawyers work very hard at keeping the access. So do companies.

What happens is that documents are flying in the door the night before a decision. Lawyers across the country are asking what caused this situation. Even the D.C. circuit is expressing worries that this agency is getting out of control. The FCC is not really developing a record and procedure with late night filings that often do not tell you what really happened in the conversations and meetings.

I have shut a lot of that down. The problem is I do not control every office and some offices think that's just the way you do business. I might be stubborn and I might be losing something in the political game, but I do not call companies and ask them what to think. I just don't. We should have the peace of mind and confidence in our authority and judgment to make decisions. We should stand by our decisions without needing companies' approval, because seeking approval gets dangerous.

Another thing that I do not have an answer for is the process of selecting Commissioners. My colleagues are great people. But the selection process has become highly politicized, where people are actually being promoted for the sole purpose of representing only one narrow interest. In two or three Commissions that I have worked on, there were a couple of people who think they work for senator X or constituency Y. Constituencies work very hard to stack the FCC with people whom the constituencies think will be their reliable people.

If you want judges, you have to stand by the people who will rule both against you and for you depending on what is fair. But as long as people play this game and do not care about what happens to the rest of the country, you will hear complaints at conferences like this because everyone can play this game. It would be better if nobody played this game.

Professor Weiser: There is a lack of scholarship on this issue, and I would encourage others to write a scholarly explication. It is an important set of issues.

VII. WASHINGTON IDEOLOGUE

Professor Weiser: I want to move on to another question, which is dealing with the nature of Washington and its tendency to put people into a box. In your case, the box is a pro-business ideologue who does not care about consumers. How do you react to this unfortunate tendency and how does this label fit with some of the things you championed like number portability,¹⁸ Do Not Call,¹⁹ and hearing aid compatibility²⁰?

Chairman Powell: I love this criticism. In 2005, with the United States democracy and capitalist system standing on the reign of world history, the lesson of the Twentieth Century is that Communist and socialist models basically collapsed into the sea. I cannot believe that anyone still has to continue to defend the commitment of the market to maximize consumer and public interest welfare. The idea that businesses and consumers are incompatible is ridiculous. It just amazes me that every ten years somebody has to prove again that when you allow businesses to operate in a market and have a dialogue between producer and consumer, they find mutual value.

So if I am pro-business because I believe free markets maximize consumer welfare, I am guilty and I do not want to be anything else. But any real free market includes the rule of law for market failure and for social or political imperatives. Any free market is not inherently economic in nature. I would be doing a weird job if I did not actually believe that regulations are for the benefit of the consumers. I guess you can put number portability and do not call in the protecting consumer interest category. But we don't go out and sing off the mountaintop about them. It is unfair and trivializing consumers if there is a portfolio of things just for consumers and somehow everything else is for something else. Our view is that everything we do is about consumers.

The right pricing model is to maximize overall consumer welfare.

18. See FCC Clears Way for Local Number Portability Between Local Wireline and Wireless Carriers, FCC 03-284, CC Dkt. No. 95-116, 2003 WL 22658210 (Nov. 10, 2003), available at http://hraunfoss.fcc.gov/edocs_public/attachmatch/DOC-241057A2.pdf.

19. See *Rules and Regulations Implementing the Do-Not-Call Registry Pursuant to the Telephone Consumer Protection Act of 1991: Hearing Before the S. Comm. on Commerce, Science and Transportation*, 108th Cong. (2003) (statement of Michael K. Powell, Chairman, FCC).

20. See Susan Boswell, *Hearing Aids and Cell Phones: Fast-track Work Underway to Boost Compatibility*, THE ASHA LEADER ONLINE (Nov. 4, 2003), <http://www.asha.org/about/publications/leader-online/archives/2003/q4/031104a.htm>.

Anybody who is a true student of market capitalism knows that law is critical to protection of expectations. A healthy disclosure dialogue between consumers and producers makes the market work. The government must be a steward of law; laissez-faire does not work.

VIII. EXPLAINING WHAT FCC DOES

Professor Weiser: Having written the book *Digital Crossroads: American Telecommunications Policy in the Internet Age*,²¹ I can definitely say that explaining telecommunications regulation is no easy task.

Chairman Powell: You are hawking that book.

Professor Weiser: I sure am. When I try to broach the subject, often the first thing people say is “what do you think about that Janet Jackson episode?” Last year, you noted that she obviously had her own definition of “open access.” But seriously, how do you get away from talking about indecency? The public and mainstream media seem to be focused disproportionately on indecency because most people can understand that. People do not understand things like the complexities of the layered model or the Digital Broadband Migration. How do you begin to communicate to the public about what your vision is and why telecommunications regulation is important for their lives?

Chairman Powell: First of all, you have to have a thick skin and just accept that people tune in for what they care about, and they tune out when they are not interested. Mainstream media likes high profile controversial stories. If a story is not controversial, rarely is the story interesting to them for selling papers. They like issues that are simplistic to understand—ripping cloth off is a pretty easy story. I better stop there.

This type of story is one-dimensional and does a disservice to what the FCC is involved in. It trivializes the most important things the FCC does, which has a much more meaningful impact on your child’s life than whether the Super Bowl was or was not decent. The FCC has to be involved in the decency issues as required by our Congress. I find the decency issue fascinating only from the standpoint of how the media writes about us. It is as if it’s a complete discretionary action on our part. It’s as if we do it just for fun: we sit around in a movie room, watch dirty TV, decide to go get them, take the money, and have a party.

Trust me, we do not have this room. But I dwell here for a second because your students should hear this. If you have been charged to do something, leading at a principled level means doing what you want to

21. JONATHAN E. NUECHTERLEIN & PHILIP J. WEISER, *DIGITAL CROSSROADS* (2005).

do, as well as doing what you are not necessarily comfortable doing. In 1927, the American people asked their representatives to pass a statute that bans indecency.²² The statute has never been overturned or modified. The Justice Department could have gone and arrested Janet Jackson for violation of the Indecency Statute. We have not gone that far, thank God.

But it does not matter what your personal comfort level is about these things. If you are sworn to uphold the Constitution to execute your duty as you are assigned, you will enforce the law particularly against public complaint. But if you are at *The New York Times*, you are free to criticize if you do not like the policy. But let's be candid about it: you are criticizing the American public that passed the statute. You can use me as a convenient moniker if you want, but what you are really saying is you are very disturbed by the fact that a significant majority of Americans want those limitations.

Also, mainstream media should stop personalizing policy about one or two people, because policies will not be adopted if only one or two people want them. When the United States Senate, Democrats and Republicans alike, vote 99 to 1 to raise the indecency standards by a factor of 10, it is a much more widely held view than because Mike Powell is on a crusade. This point is very important because an administrative agency is not all-powerful. The people are free to make constraints and empowerment through their representatives and we have to apply the statutes.

I do have to find ways to change the dialogue. One of the things I often do with groups is ask people to pull out their electronic devices. Turn those devices over and you will find the FCC stamp. The stamp is on everything. If that does not give you the sense of the breadth and depth of our portfolio, I don't know what does. Your Xbox, your TV, your cell phone, all have our stamp on it. That is because we type-approve equipment in our laboratories. But more importantly, it is a wonderful symbol of how broadly and expansively we are invited to participate in the digital space.

If you look at the Telecom Act, basically if an electron bounces off of you, we regulate you. Photons too now—we have now expanded our portfolio to include light. I have heard all these reform discussions and I kind of cringe because I hear people suggest getting rid of the FCC. The FCC is growing and not shrinking because our portfolio is defined by the movement of electrons and photons. I wish I could do a “day in the life of the chairman” video. You would be shocked by the issues we are immersed in on a daily basis.

22. See 18 U.S.C. § 1464 (2005).

What I do with consumer groups is just try to point to things. For example, telling them why their TV does this or that because we did or did not do something. I also learned to talk about these things. You have just heard me talk here and I talk about your kids. Because there is something intuitive in our ability to relate to our children and their world, parents and adults somehow understand that the digital creatures that are living in their houses are strange. The digital creatures are not of this world and consumers do not understand them. People ask, what is Xbox Live and what is my kid doing? If you learn to translate that stuff, very quickly people get it. You cannot talk the way we hideous lawyers talk.

IX. UNIVERSAL SERVICE

Professor Weiser: One of the most challenging issues for the FCC has been transitioning from a legacy model of affordable telephone service. Given its emphasis on implicit subsidies that are captured by intercarrier fees, the Internet and VoIP are breaking this system. But the political will to come up with a different model seems difficult to generate. Joel Klein, whom we both worked for, said that the problem with universal service is that Congress wants to deficit finance it, which means once everybody gets the benefit, nobody wants to pay. What are your thoughts on this challenge and how to confront telecom policy in the future?

Chairman Powell: It is a tough one. Sometimes when you are tangled up, the best thing you can do is to try to go back to the first principle and the alphabet. Too often I hear people talk about universal service in terms of the current mechanism and program, and lose sight of what the purpose is.

The goal of universal service is ubiquitous service for all Americans at affordable rates.²³ Everybody agrees on this. Now we can talk about all kinds of ways to achieve it. As long as we achieve it, why do we care how we do it? If you are really willing to embrace that fundamental principle, you have the courage to take on the current way we do it. The current way we do it might have been fine. I said “might have” because I am not convinced that the current way is optimal.

Universal service was built entirely on the premise of a monopoly over the last 100 years. The monopoly gets both the exclusive burdens and the exclusive benefits. Ma Bell never cared about universal service. All she was doing was slushing money from one bucket to the other. Implicit subsidies did not matter until you broke Ma Bell up. After you start having competition, people beat subsidies out of the system and

23. See 47 U.S.C. § 254 (2005).

now you have a distorting impact that did not exist before.

This is the incrementalism model I was talking and worried about. People always want to bolt something else onto universal service in an attempt to fix it. It's like your old Chevy you had in high school. If you can just change this part, the Chevy is going to get to the gas station. Well, you are about to run out of gas and you need a new car. We need a new car. What is really not depressing, but challenging, about this is that the improvement in cars in the interim has been enormous.

There are so many easier and exciting ways to achieve ubiquitous and affordable service for Americans in every corner of the country today than there have ever been in history. Yet, we are still trying to push this broken Chevy up the hill instead of hopping into this cool hybrid. If you are a wireless service provider in rural America, you are running circles around the subsidized wireline model trying to do the same thing.

Why aren't we embracing the new vehicle to get to the event? Goals can be venerable; universal service goals are venerable. But it does not mean the approach has to be ancient. We have to separate those two things as a political matter. Also, as a political matter, we need to talk about how to muster political will. We better start having some courage to ask, Is this about rural consumers or rural producers? The cold truth here is that the policy is about the latter. I see people argue extraordinary things that actually harm rural consumers in order to preserve a quasi-monopoly.

I am going to get into trouble for saying this, but I do not care anymore. Universal service has to be taken on directly. I have heard people who otherwise are champions of competition tell me that wireless companies should not be allowed to compete and offer substitute services because it would take revenues out of the system. So these people want to condemn rural people to monopoly forever? One day this incrementalism model is not going to work because technology is going to rip it up everywhere.

What about the idea of having a little more patience and try to work on it? That's fine, but if you think it gets better with time, you are wrong. It's not fine wine, it does not get better with age. The problem will not get easier. We can either be a part of it and try to manage the collapse and reorientation, or we will let it blow up into smithereens and then wonder what happened to all the companies. So I keep listening to people who always say, go slow, don't do this, don't touch it, just a little more here and there. And I respond, when are we going to have the courage to stop perpetuating this incrementalism model?

Additionally, would the world not be better without this incrementalism model? You go to rural America, and there are two wonderful public policy bugaboos that make me laugh because they are

completely inconsistent. On the one hand, the problem is the digital divide; on the other hand the problem is universal service. What does the digital divide mean? It means if I live in South Dakota, you better get me all that stuff they have in New York. I do not want to hear that New Yorkers have VoIP, wireless, and cable with 120 channels. I want that stuff here, too. So close the digital divide, bring me all those same things they have over there. But then universal service makes sure those things do not come to me so that the guy providing the old stuff stays viable. This is the quandary that we live with. But by at least admitting to it, maybe we will have a better dialogue of what to do about it.

X. REWRITING THE TELECOMM ACT

Professor Weiser: That's the spirit of this conference, which gets to the title, *Rewriting the Telecom Act*. What are your thoughts on this project?

Chairman Powell: I do not need to repeat it, because now there is consensus. Is the current one broken? Yes. But can a solution be worse than the broken thing? Yes. So it raises the question of what you should do about it. Dick Notebaert today eloquently said that the FCC has all the authority to do it.²⁴ It is plausible that we could just do it, but I do not think it can go the distance that he would really want to see. Like it or not, as the statute becomes more ambiguous, making the choices becomes more politicized. It's like an asymptote where you get closer and closer but you cannot quite cross. You are still legally bound to faithfully administer a dying statute and you cannot get too far afield without putting yourself in trouble with the judiciary. You actually need a new direction.

My current view is not to start on page one and rewrite all 75,000 words of the Telecom Act. Otherwise, it will take seven years, produce the same bizarre lobbying practices that the last one did, and not come out better. Instead of writing a new Telecom Act, write an Internet Protocol (IP) statute. A small, light, and standard IP statute that talks about what the regulatory environment should be under the Internet Protocol. Just define it. Then tell the market, here is the Telecom Act of 1996 and here is the IP Act of 2005. As companies make investments and move their networks, the act becomes self-executing deregulation.

The act would plant the seed of its own future by reinvesting what the country gets from the deregulation in advanced architecture that leads to IP. It is true that for a while, some guy like Vonage gets to start in IP. It's not a travesty; maybe it gives more incentives to get to IP

24. Richard C. Notebaert, *Overseeing the Unforeseeable: A Rational Regulatory Approach to 21st Century Communications*, 4 J. TELECOMM. & HIGH TECH. L. 31 (2005).

quicker. It is possible for this Congress to get together and do a VoIP statute. But it should be an IP statute because it is going to be about video, not just voice, in the next year. If the Congress can do an IP-everything statute, the statute can define core principles about not regulating economic terms and conditions. The statute should be 25 pages long at the most. Promulgate the statute and tell the world: Go. Anybody who wants to make investments, build the infrastructure, and provide the services gets to go to the Promised Land.

One thing I fear is that we have made a lot of progress trying to make the best of a bad act. If I were Wall Street, I would be scared again and I would not want to put any money into anything because I do not know how this will come out. I have seen big companies crash around the Hill trying to screw their competitors and help themselves. I would not know where my money is going and I would not want to do it anymore. We are starting to get to a pretty decent place in the investment side. I would hate to see it shut off because Congress lacks a clear direction.

So this is why I like an IP-everything statute because it charts a very clear path. I would, as an investor, put pressure on old-line companies to make the investments. The old-line companies would actually have the story to tell Wall Street: If I go to IP, I get to go to the Promised Land, so award me with risk capital. Let me go to IP and I will not have the problem of having to convince those knuckleheads at the FCC.

It's self-executing and it's the best I have got, Phil.

XI. PROUDEST ACCOMPLISHMENT

Professor Weiser: That's pretty good. Before opening up for questions, I have six short questions for you. What is your proudest accomplishment as Commissioner and Chairman?

Chairman Powell: You may be surprised; it is not a policy. I believe it is things like the FCC University and what we have done to reform the FCC. I grew up in a leadership model that said your goal is to make yourself dispensable. The day you are dispensable, you should leave. The legacy is only what you leave behind, not what you did while you were there.

If I did anything that matters, I hope it lives on in the career employees at the FCC, in the institution, in the FCC University, and in their focus on technology. If twenty years from now I hear the same kind of stuff out of the FCC, and they are still looking at tough issues, I will be really, really proud.

Whatever the policy of the day is, that's going to come and go. Ten years from now, whatever we are talking about today may or may not be there. But the institution and the people probably will be. My

management model is a lot like the top Illinois basketball team. I cannot predict the game. I do not know who is going to get hot or what will open up. But if the team is disciplined, well-trained, and adaptive, they go on the court and win games because they move, they adjust, and they pick up.

I cannot predict what the FCC will have to do five years from now. But if I had the right players with the right training, the right discipline, and the right message, I am pretty confident that they will make the adjustments and constructive decisions that win the game.

Professor Weiser: Favorite TV show?

Chairman Powell: Fox's *24*. Unequivocally the best show on television. I love TV. I am a TV-aholic. I have two TiVos. I watch TV all the time. And *24* is awesome and it is coming to a cell phone near you this year. This is digital migration at its best. Fox has actually written a minute version of *24* for cell phone, which airs this year on your cell phone.²⁵ How cool is that—Jack Bauer all the time.

Professor Weiser: In the movie version of your life, what actor would play you?

Chairman Powell: Denzel Washington. Isn't that what every black man would say?

Professor Weiser: You know Jamie Foxx, as I understand it, is closing in on that race.

Chairman Powell: Yeah, well, he doesn't look as good in a uniform.

Professor Weiser: (lots of laughter).

Chairman Powell: This is when the moderator loses it. Like a *Saturday Night Live* skit when the actors finally break.

Professor Weiser: That's right. As an avid user of technology, what gadget would you most recommend to a friend?

Chairman Powell: I have to provide my answer in two categories. First, in entertainment, iPod and TiVo are my favorites at the moment because they embody the true power of personalizing technology and changing a system that used to be institution-centric. Instead of telling you what the album is, they give you the power to self-create. That is really cool. Second, in business productivity, I cannot live without my Blackberry.

Professor Weiser: If you have to choose between the Blackberry functionality and your cell phone, which would you choose?

Chairman Powell: They are the same!

Professor Weiser: What do you want to do when you grow up?

Chairman Powell: I don't ever want to grow up.

25. Seth Sutel, *Fox to Provide TV Series for Wireless Phones*, USA TODAY, Nov. 11, 2004, available at http://www.usatoday.com/tech/wireless/phones/2004-11-10-tv-for-mobile-phones_x.htm.

XII. ADVICE FOR SUCCESSOR

Professor Weiser: What advice would you give to your successor?

Chairman Powell: It is really easy to be timid, conservative, and comfortable in government service, particularly in an agency like mine. You can avoid controversy if you want. You can keep things quieter than we have been if you want. But why bother? It is sure not the money. If they let you ride the horse and pull the reign, go for it.

The next Commission has to be courageous to truly be bold and visionary. Lead and not react. Do not let other people take the heat while you sit back and figure out whether that's a good thing to be a part of. Dare to go out to the front line. You will be wrong sometimes. So what? If you move forward three steps and fall back one every now and then, that is OK. One thing I am proud of my Commission is we did not shirk from doing the hard stuff. We did not get it right all the time, but we were always willing to go into that water. We did not shy away from something just because it was going to be hard or somebody was going to call you out.

Another thing is to be better prepared for battle and be ready for pain. If you are going to lead, do not think you get to do it for free. The minute you do something someone does not like, they will come after you, really hard. They will call your children names. Sometimes I read stuff. But if you do not have the courage, the conviction, and commitment to be bold and stick to a set of principles, that stuff will eat you alive. Nobody better want this job if they cannot handle being slapped around a bit.

Be able to communicate to people, not to lobbyists. Talk to consumers and they will come to your rescue. Consumers came to the rescue in the digital migration. I do not care if *The New York Times* does not get it. Their children do and they will own the *Times* someday.

And then take care of your soldiers. I will never forget when I was a brand new lieutenant and I was moving to Germany, my father, who was a general, came in and kissed me on the cheek. He only had one thing to say to me: When you get there, take care of our soldiers, that's all you are for. So, you better take care of the FCC and the industry in a way that you have been privileged to do. The rest will follow. It's a great ride.

XIII. QUESTIONS AND ANSWERS

Professor Weiser: I know you love questions, particularly from students. I would open the floor to students in particular and then I will get to others as well.

Student: Are there plans to regulate the content of satellite radio?

Chairman Powell: Not for the next thirty days.

A. Media Ownership

Student: Will you provide your perspective on media ownership?

Chairman Powell: As a country, we are kind of messed up about media. What I mean is that for all the debates, struggles, and controversy, we are a country not completely on the same page with a common understanding of the media ownership problems. If we cannot come to a common understanding of exactly what problems we face and how they manifest themselves, it is hard to get consensus on the appropriate solutions.

I have never met anybody who does not believe that media ought to promote diversity and localism. I have never heard anybody who does not understand the value of a free media environment and democracy. But free media does not translate to the specific judgments. If you are a competition policy guy, you know how to do that. We know how to measure concentration and make predictions about prices. But diversity and localism are very elusive values. You would never get an argument about needing them, but you would get bitter arguments of what constitutes diversity and localism.

You have to be on guard that diversity and localism are not defined by political power *de jure*. For all the nobility associated with these concepts, they can lead to dangerous impulses. They can lead to an invitation for government to decide when content is sufficiently diverse or local. One of the things we tried, but did not do successfully, was attempt to find more objective measures that are not just results of a power struggle or a political process.

If I talk to my liberal friends, they think the end of civilization is the Fox network. Half of the noise is about Fox and conservative Christian radio. Meanwhile, we say we want diversity. But isn't this diversity? We have had three networks for forty years. Fox is the fourth to the market, which is one more voice and it is conservative. Yet, somehow, Fox is the death of democracy.

You also have to be on guard because I often find people involved in this argument like the monopolist as long as the monopolist is one of them. I do not mind this as a noisy public discourse. But it worries me a lot when you invite government to be part of that, because I can go to the Hill and get lots of different reasons that are not entirely noble as to whether people would want this or that media ownership rule.

This is what Thomas Jefferson was worried about. Big media and privately owned media definitely involve risks. But the risks are not the greatest kind or the kind that our founding fathers were worried about. The risks that our founding fathers were worried about were the kind when those with the power and the political control would manipulate the press to promote their values for their own purposes. So when

people start talking about the government being involved and drawing constraints, we had better be on guard.

Here is another bugaboo in media where I often find one of the imponderables. Sometimes I hear that we should have diversity in the market place of ideas. I also hear that we should also have fair, unbiased media that reports objectively without a viewpoint. These things don't always square. For example, the liberals hated the election film from the Sinclair Group because the film contained a biased point of view. The argument was that the film should be fair, objective, and unbiased portrayal of news. But when Disney refused to distribute *Fahrenheit 911* because Disney believed the film was too political, many of the same liberals condemned Disney for squelching a diverse point of view.

The only thing that reconciles the two events is that it all depends on your political view. If you were liberal, you were all for *Fahrenheit 911*'s wide distribution. If you were conservative, you loved the Sinclair Group film. Neither side was clean in this argument. But this cannot be the purpose of what the regulatory model should be.

Lastly, the public was given the misimpression that the media ownership debate was about media in general. Instead, the media ownership debate is only about broadcasting. We sit here in these conferences and talk about the Internet, cable, satellite, cell phone, and all these other ways people get news and information. But none of them is included in the calculus for media diversity. It is ironic that MoveOn.org criticized us for including the Internet as a source for media diversity. Yet, MoveOn.org's power in the political process is being extensively derived from the arrival of the Internet.

We continue to treat broadcasting in a unique way. We will never go anywhere unless we are willing to take a more sober and open-minded assessment of all media sources at once, recognize consumers in all these spaces, and build the rules accordingly. It is true that some of our rules were liberalizing. But we did not succeed in our attempt to modernize the media rules to include the other media sources that consumers truly were embracing. If we can count cable as a media source, the market is in fact more diverse. A more diverse market makes it harder to justify tighter ownership limit. All we were trying to do was to better evaluate media diversity.

My child has no idea about the difference between channel 7 versus 107 and my child does not know what a broadcast network is. Yet we are regulating in these buckets as if there is a difference between channel 7 versus 107. We need to admit that the problem with media ownership is not concentration, but its hyper competition and access abundance.

B. VoIP

Student: In your estimation, what is VoIP and its future?

Chairman Powell: The future is very bright. But VoIP is only emblematic of something bigger. We have to get past VoIP because everything is data. Put zeros and ones in a stream, they can represent a picture, voice, or video. I do not like it when people talk about the triple play. There is no triple play, there is one play and it is data. VoIP is most notorious simply because it is the first data application that really goes right to the teeth, similar to what MP3 and Napster have done. VoIP goes right into the teeth of various established institutional business lines and challenges some very big long-held views about what the service is. Video over IP is going to be just as intriguing.

C. Authority for “Net Freedom”

Student: Do the current telecom regulations give you legal authority to deal with “Net Freedom” concerns?

Chairman Powell: Conceivably. The statute speaks somewhat differently depending on who the gatekeeper is. Arguably, the statute has principles of nondiscrimination for common carriers that could be a cause of action. So maybe it’s in there, maybe it’s not. It is kind of an open question. But our greater aspiration for Net Freedom would cross both telecommunications and cable, and currently this is not fairly incorporated in the statute. While I personally believe in them deeply and would be the first to put them in place, I would also be very careful that you know what you are going after because it can quickly result in all kinds of administration that are not worth the cost. So having some caution and humility about applying the statute and how you move forward is important.

D. The Courts

Student: What is the relationship between the FCC and the courts? How does the *Brand X* decision²⁶ reflect this dynamic?

Chairman Powell: Well, the Ninth Circuit is terribly wrong. Beyond that, the FCC’s relation with the courts is fine. The court problem currently is the statute’s problem—an unintended byproduct when you try to write a statute that is thousands and thousands of words long. Words are imprecise and you create an enormous amount of ambiguity and inconsistency. This is the stuff of lawyer dreams. The problem with the statute arises when it is graded by technology. Every

26. *Brand X Internet Servs. v. FCC*, 345 F.3d 1120 (9th Cir. 2003), *rev’d*, *Nat’l Cable & Telecomms. Ass’n v. Brand X Internet Servs.*, 125 S.Ct. 2688 (2005).

time we have a question, it is a novel application of a wordy statute to a particular set of facts.

Companies have had no problem running us up the court flagpole on three-year cycles every time we try to do something. So, if you want to speed stuff up, stop suing me. Accept your medicine of what we decide and be done with it. But no company seems willing to do that either. So these companies are as much a culprit in the lengthy processes. What has happened, unfortunately, is that the statute does have so many tensions and inconsistencies. If a company does not like what we do, the company will sue. But what is really going on is that courts are being invited into the legislative process.

With all due respect to courts, they are people and they have thoughts about these things. Normally, under differential principles, you just yield to the FCC. But there are so many muddy ways to claim an effect of the will of the Congress. Well, I do not know what the Congress meant, but if you are sufficiently motivated, you can be really critical of the FCC. You can easily find a net statute to suggest that the FCC just is not effectuating the will of the Congress. This is a wider invitation to companies and courts to stray quite a bit farther than they should. For example, the Ninth Circuit reached a question that was not even necessary for a resolution. Nobody briefed the question. All of a sudden the court started talking about what is broadband. But what is broadband is not and should not be a judicial question.

I do not know why the court seemed to think they needed to tell us, the expert agency, what was telecom and what was broadband. But in fairness to them and the court system, that is why I do not like really long statutes. Long statutes are just litigation Merry-Go-Rounds and provide ample opportunity for litigation. None of the major rules we have done have not gone up and down the courts. We have been to the Supreme Court probably more than any federal agency I know of. We seem to live up there. I have dinner with Justice Scalia at these parties and he would say, so you are back. I would say, yes sir, do right by us, won't you?

XIV. A GREAT AMERICA AND A GREAT AMERICAN

Professor Weiser: Final thoughts?

Chairman Powell: No, I would just thank you Phil and this conference and Colorado because you have been a good friend to me. As we discussed last night, you either forced me, conjured me, or invited me, to almost always come here to try and set out what we were going to do for the next year. As your litany showed, we have. This is a smart conference. I have been to a lot of dumb conferences with a lot of weird abstract ideas. This is a hardheaded, trying-to-solve-problems

conference and I commend the people who come.

And I would just say to the Bar and everyone who work in this field, This is great stuff. Our nation's competitiveness, our nation's welfare, the future of our children, our labor market, our economy, and our health care system are all dependent on whether we all get this right. Demand your governors, your presidents, your politicians, and your leaders to take this seriously. This is whether the United States remains a great nation for the next great epic or it doesn't. It is doing OK, but it is not living up to its greatest glory. That is the responsibility for everybody in this room.

Professor Weiser: It's clear you are not done with your leadership for this industry. We look forward to bringing you back here. Your continuing involvement and what you do next will be exciting. As Dick Notebaert said, You are truly a great American.²⁷ Thank you very much.

Chairman Powell: Thank you very much.

27. Notebaert, *supra* note 24.

