

**IN THE UNITED STATES DISTRICT COURT
FOR THE NORTHERN DISTRICT OF GEORGIA
ATLANTA DIVISION**

**DONNA CURLING, ET AL.,
Plaintiffs,**

v.

**BRAD RAFFENSPERGER, ET AL.,
Defendants.**

Civil Action No. 1:17-CV-2989-AT

**CURLING PLAINTIFFS' MEMORANDUM IN SUPPORT OF
MOTION FOR PRELIMINARY INJUNCTION**

TABLE OF CONTENTS

I.	INTRODUCTION	1
II.	STATEMENT OF FACTS	8
III.	ARGUMENT.....	15
	A. Curling Plaintiffs Are Likely to Succeed on the Merits.....	19
	1. <i>Curling Plaintiffs Have Standing</i>	19
	2. <i>Curling Plaintiffs Are Likely to Succeed on Their Constitutional Claims</i>	21
	B. Curling Plaintiffs Will Unquestionably Suffer Irreparable Injury Absent Court Intervention	25
	C. Balancing the Equities and Considering the Public Interest Heavily Favor Injunctive Relief.....	27
IV.	REQUESTED RELIEF	29

TABLE OF AUTHORITIES

Cases

<i>Anderson v. Celebrezze</i> , 460 U.S. 780 (1983).....	21
<i>Burdick v. Takushi</i> , 504 U.S. 428 (1992).....	21
<i>Common Cause/Ga. v. Billups</i> , 554 F.3d 1340 (11th Cir. 2009)	20
<i>Curling v. Kemp</i> , 334 F. Supp. 3d 1303 (N.D. Ga. 2018).....	20, 25, 26, 27
<i>Curling v. Raffensperger</i> , 397 F. Supp. 3d 1334 (N.D. Ga. 2019).....	passim
<i>Frontiero v. Richardson</i> , 411 U.S. 677 (1973).....	25
<i>League of Women Voters of Fla., Inc. v. Detzner</i> , 314 F. Supp. 3d 1205 (N.D. Fla. 2018)	passim
<i>League of Women Voters of N.C. v North Carolina</i> , 769 F.3d 224 (4th Cir. 2014)	25
<i>Purcell v. Gonzalez</i> , 549 U.S. 1 (2006).....	17, 18, 27
<i>Republican Nat'l Comm. v. Democratic Nat'l Comm.</i> , 140 S. Ct. 1205 (2020).....	17, 18
<i>Siegel v. LePore</i> , 234 F.3d 1163 (11th Cir. 2000)	15

Stewart v. Blackwell,
444 F.3d 843 (6th Cir. 2006) 23, 25

Statutes

42 U.S.C. § 198330

42 U.S.C. § 198830

Constitutional Provisions

U.S. Const. amend. XIV, § 115

I. INTRODUCTION

“Voting is the beating heart of democracy.” *League of Women Voters of Fla., Inc. v. Detzner*, 314 F. Supp. 3d 1205, 1215 (N.D. Fla. 2018). It is a right guaranteed by the United States Constitution—not just to cast a vote, but to have it counted as intended. This fundamental right is under assault, including by sophisticated nation states, such as Russia.¹ Those efforts have specifically targeted Georgia.² Despite this reality—and despite multiple admonitions from this Court to maintain a secure, reliable voting system—Defendants inexplicably have refused to do that. They adopted the current system against the advice of their own election security experts.³ They also have steadfastly refused to allow any election security experts to inspect that system, just as with the prior system while it was in use despite being hacked

¹ Sean Gallagher, *DHS, FBI say election systems in all 50 states were targeted in 2016*, *Ars Technica* (Apr. 10, 2019, 2:20 PM), <https://arstechnica.com/information-technology/2019/04/dhs-fbi-say-election-systems-in-50-states-were-targeted-in-2016/>.

² Sergio Bustos, *Feds: Russian hackers targeted election websites in Fla., Ga. And Iowa in 2016 elections*, *USA Today* (July 14, 2018, 1:07 AM), <https://www.usatoday.com/story/news/2018/07/13/feds-russians-targeted-election-websites-florida-georgia-and-iowa/784391002/>.

³ Dkt. No. 554, Shamos Dep. at 56:13-57:2, 57:13-21; Dkt. No. 615-2 (“Lee I”) at 4 (In his recommendation to the SAFE Commission set up by Governor Kemp, Dr. Lee concludes, “A secure voting system should use hand-marked paper ballots instead of ballot marking devices. . . . This consensus approach among the cybersecurity research community ensures that votes by the voters are counted accurately.”).

multiple times. Against the backdrop of an unsecured, unreliable system, voters cannot even verify their own votes in the current system. Voting in Georgia is akin to whispering one's vote to someone behind a curtain and hoping they record it as intended. The Constitution requires more. And so should this Court.

The current voting system suffers from at least three fatal flaws that render it unconstitutional: (i) no voter can verify his or her own vote⁴; (ii) the system is unsecured in an environment of advanced persistent threats and numerous security vulnerabilities⁵; and (iii) the system is so needlessly complicated and cumbersome that it disenfranchises voters. Defendants offer essentially two defenses: trust the system, and failing that, trust whatever audit they plan to conduct at some point in the future. Again, the Constitution requires more—and so should this Court.

The little testing Defendants point to for the system is far from adequate, just as their own election security expert admitted about the prior system—an admonition they have likewise disregarded for the new, BMD-based system.⁶ They

⁴ As this Court observed and Defendants admit, “no elector can visually review and confirm whether the QR code accurately conveys his or her votes, as filled out on the BMD screen or appearing on the printout.” *Curling v. Raffensperger*, 397 F. Supp. 3d 1334, 1341 n.10 (N.D. Ga. 2019) (“*Curling II*”).

⁵ *Id.* at 1375-82.

⁶ *See* Dkt. No. 554, Shamos Dep. at 56:13-57:2, 57:13-21; *see also* Lee I at 2 (“[T]o have a voter cast his vote on a [BMD] with a cyber component, and print out a paper receipt that the voter would verify” is “much less desirable” than

again claim that the system is “air-gapped”. But they offer no evidence of this and tellingly resist any discovery, which belied this claim the last time they made it, as their expert admitted. Plaintiffs already have learned that the new system is connected to the Internet via WiFi networks that allow remote access by Dominion, and potentially others.^{7, 8} Worse yet, there is evidence of significant data errors and the State’s unwillingness to assess the core security concern.⁹ In fact, it appears Defendants are entrusting Dominion with much of the operations and security of the system—akin to entrusting ballot building to independent contractors working out

“hand-marked paper ballots, [where] a voter both casts and verifies” his or her selections, in part because the BMD “may have a vulnerability that could be exploited to change votes.”).

⁷ “[D]uring the November 2019 pilot of the state’s new voting equipment, the Secretary of State responded to widespread electronic pollbook problems that were disrupting the normal voting process by directing the private vendors that support this equipment to ‘do a universal fix quickly by loading [a] dataset through a WiFi connection.’” Letter to Jasmine Shannon, Elections Division, Ga. Sec’y of State, Brennan Center for Justice (Jan. 13, 2020), https://www.brennancenter.org/sites/default/files/2020-01/Brennan%20Center_Public%20Comment_Georgia%20Proposed%20Election%20Rules.pdf. See also Ga. Sec’y of State, *Executive Summary, Initial Findings: Pilot Counties Municipal Elections 2019, New Georgia Statewide Voting System* (Nov. 14, 2019), https://sos.ga.gov/admin/uploads/Executive_Summary_Initial_Findings_Pilots_11-14-19.pdf.

⁸ State Defendants’ own expert advised against this. (Dkt. No. 554 at 70:25-71:2 (Dr. Shamos: “The systems in use for election management should never, at any point in their life, have ever been—ever be connected to the Internet.”).)

⁹ See, e.g., Ga. Sec’y of State, *Executive Summary, supra* note 8, at 4.

of their homes in the prior system. And the little already known about the “audit” Defendants conducted in Fulton County during the June 2020 primaries establishes that it is wholly unreliable for catching outcome-altering interference or failures.

Beginning with the 2019 pilot elections for the new BMD-based system and continuing through recent elections, the new system has proven spectacularly chaotic and unreliable.¹⁰ This comes as no surprise given the enormous, unprecedented undertaking Defendants assumed with this needlessly complicated system composed of many electronic components. The Court had the foresight to anticipate the sort of problems that have plagued the system and disenfranchised voters, and required a contingency plan to protect the right to vote in Georgia.¹¹ But Defendants never adopted—much less implemented—an actual contingency plan.

¹⁰ Mark Niese & David Wickert, *Georgia bets on new voting system amid high-stakes election*, Atlanta Journal-Constitution (Jan. 15, 2020), <https://www.ajc.com/news/state--regional-govt--politics/georgia-bets-new-voting-system-amid-high-stakes-election/XVR7Jw5i1J7MiZ11O8xUZK/>; Nick Corasaniti & Stephanie Saul, *Georgia Havoc Raises New Doubts on Pricy Voting Machines*, N.Y. Times (June 11, 2020), <https://www.nytimes.com/2020/06/11/us/politics/georgia-voting-machines.html>.

¹¹ Dkt. No. 768 at 4-5 (“As the record evidence indicated that no State in the nation had previously introduced a new statewide voting system in the short time frame projected by the Georgia Secretary of State for rollout of the BMD system and as the severe inadequacies of the DRE system made for a faulty foundation for the future, the Court addressed in its order the issue of the need for a contingency plan other than continued use of the DRE system.”).

Instead, they subjected Curling Plaintiffs and other Georgia voters to widespread malfunctions of voting equipment, average wait times approaching four hours, and lack of sufficient voting equipment, paper ballots, poll workers, and training for the workers they provided.¹² Defendants were forced to admit that their performance was, yet again, “unacceptable.”¹³ Put simply, Defendants merely replaced one unconstitutional system with another.

For these reasons, Curling Plaintiffs seek preliminary injunctive relief against further use of the Dominion BMD-based system for voting. Curling Plaintiffs further seek to require hand-marked paper ballots (“HMPB”) for in-person voting,

¹² Mark Niese, *Problem with new election equipment delays voting in Georgia counties*, Atlanta Journal-Constitution (Nov. 6, 2019), <https://www.ajc.com/news/state--regional-govt--politics/problem-with-new-voting-equipment-delays-voting-georgia-county/vxltEshk0grck0uJiWA5RM/>; Richard Fausset, Reid J. Epstein & Rick Rojas, *“I Refuse Not to Be Heard”: Georgia in Uproar Over Voting Meltdown*, N.Y. Times (June 9, 2020), <https://www.nytimes.com/2020/06/09/us/politics/atlanta-voting-georgia-primary.html>; Dianne Gallagher, Paul P. Murphy & Kelly Mena, *Polls closed in Georgia after a day marked by voters waiting for hours to cast their ballots*, CNN (June 10, 2020, 8:11 AM), <https://www.cnn.com/2020/06/09/politics/georgia-primary-election-delays/index.html>; Maggie Miller, *Georgia officials launch investigation into election day chaos amid voter suppression concerns*, The Hill (June 9, 2020, 4:28 PM), <https://thehill.com/policy/cybersecurity/501904-georgia-officials-launch-investigation-into-election-day-chaos-amid>.

¹³ Kevin Collier et al., *Georgia election “catastrophe” in largely minority areas sparks investigation*, NBC News (June 10, 2020, 7:07 AM), <https://www.nbcnews.com/politics/2020-election/georgia-secretary-state-launches-investigation-after-unacceptable-voting-problems-n1228541>.

as it is well established that they are the only reasonably secure, reliable election system today. The pilot elections this Court ordered last fall confirmed this fact. Cobb County's pilot of HMPBs was successful and fared far better than the BMD pilots and subsequent elections.¹⁴ This real world application of the two systems has debunked Defendants' meritless objections to the reliability and feasibility of HMPBs in Georgia and their defenses of the BMD-based system. A successful model for HMPB elections already exists in Georgia. The relief Curling Plaintiffs seek is thus feasible and readily can be implemented for upcoming 2020 elections.¹⁵

Curling Plaintiffs understand this Court may be reluctant to order such relief with elections approaching. But the real world application of the new system has confirmed its unreliability and the need for HMPBs to protect the right to vote in Georgia. Curling Plaintiffs have gathered what they could regarding failures in the

¹⁴ GA VOTERS FOR HMPBs, *Cobb HMPB Pilot*, YouTube (Nov. 15, 2019), https://www.youtube.com/watch?v=rL_4rihgbhc&feature=youtu.be, (Janine Eveler: "The counties that were using the Ballot Marking Device were dead in the water."); Thomas Hartwell, *Eveler: Paper-ballot pilot, new machines a success in Cobb*, Marietta Daily Journal (Nov. 7, 2019), https://www.mdjonline.com/elections/eveler-paper-ballot-pilot-new-machines-a-success-in-cobb/article_16eeadb6-0181-11ea-a05e-e7ef327d817c.html.

¹⁵ As the Court previously found, "the scanning technology provided by Dominion under the State's contract and funds authorized in connection with HB 316" could be used to implement a constitutionally-acceptable hand-marked paper ballot voting system. *Curling II*, 397 F. Supp. 3d at 1409.

application of the current system from available sources, and will continue to do so. They intended to include Court-ordered expedited discovery with this filing, given State Defendants' responses were due yesterday. But State Defendants responded only with a litany of meritless objections—including the very same objections this Court already rejected.¹⁶ (Dkt. No. 775.) They have since refused to comply with this Court's Standing Order or to commit to any specific discovery, incredibly claiming they do not know what the scope of expedited discovery is even though this Court expressly determined the scope in its Order. (*Id.*) Defendants also have failed to comply with their Open Records Act obligations. Curling Plaintiffs will include with their reply brief whatever relevant evidence they eventually obtain from Defendants.¹⁷ One wonders what they fear will come to light in discovery.

With another Presidential election and others on the horizon amidst persistent threats to U.S. elections, it is more important than ever to ensure transparent, secure, verifiable elections in Georgia—and there is sufficient time to do so this year. The

¹⁶ Cross Decl. Ex. 1, State Defendants' Objections and Responses to Plaintiffs' Second Joint Request for Production of Documents and Inspection of Things, dated August 18, 2020.

¹⁷ Curling Plaintiffs also will rely on any relevant evidence the Coalition Plaintiffs submit with their forthcoming preliminary injunction motion.

Court should grant the requested relief and protect the right to vote for Curling Plaintiffs and all other Georgia voters.

II. STATEMENT OF FACTS

On July 29, 2019, Defendants confirmed their intent to award the contract for the new election system to Dominion Voting Systems, Inc. (“Dominion”).¹⁸ Defendants purchased a system comprised principally of “ImageCast X-Prime BMDs” (machines that produce QR-coded ballots), and “ImageCast Precinct Scanner and Tabulators” and “ImageCast Central Scanners” (machines that read QR-coded ballots). “The printed ballot contains a written summary of the voter’s choices, as well as a QR code which is read by Dominion’s ImageCast Precinct or Central tabulator.” (Contract § 3.1.) Under the BMD-based election system, ballot scanners tabulate votes based on the QR code, not the written text summary. (*Id.*)

The election system remains vulnerable to malware interference and corruption, does not provide a meaningful way for a voter to verify his or her individual vote, and does not provide for audits sufficient to protect the integrity of

¹⁸ Cross Decl. Ex. 2, Final Contract at Ex. B, Dominion Solution Order (the “Contract”), § 3.1 (p. 54). The Notice of Intent to Award the Contract for the election system issued the Monday morning following the Friday evening conclusion of this Court’s hearing on Plaintiffs’ prior motions for preliminary injunctive relief. (Dkt. Nos. 552, 555.) The Notice of Award issued 11 days later, after the required protest period had passed and the Secretary of State certified the election system. (Dkt. No. 575.)

the overall vote results in the vast majority of races. (Halderman Decl. ¶¶ 17, 41-45, 63.) The use of QR codes to encode votes for tabulation runs counter to longstanding recommendations of election security experts.¹⁹ While the election system purports to provide each voter with a verifiable voting record, the voter is only able to read the written text summary and not the QR code that the BMD prints and that the ballot scanner counts.²⁰ Thus, no voter can review and confirm whether the QR code accurately conveys his or her intended selections.²¹ *Cf. Curling II*, 397

¹⁹ See Halderman Decl. ¶ 7(a) (“Attacks on the BMDs could cause them to print barcodes that differ from voters’ selections. These changes would be undetectable to voters, who cannot read the encrypted barcodes. Since the barcodes are the only thing the scanners count, the impact would be a change to the election results. The only known safeguard that can reliably detect such an attack is to rigorously audit the human-readable portion of the printouts, which Georgia does not currently do.”); Kimberly Breedon & A. Christopher Bryant, *Counting the Votes: Electronic Voting Irregularities, Election Integrity, and Public Corruption*, 49 U. Mem. L. Rev. 979, 989 (2019) (with a QR code, “voter verification is impossible because the voter cannot decipher the QR coded information, and it is only the QR code that is used to count the votes. . . . [S]uch technology creates an opportunity for malign actors to flip or otherwise alter votes by manipulating programming codes in advance or by hacking the technology remotely.”) (citations omitted).

²⁰ Halderman Decl. ¶ 2; Doug Richards, Critics: New Georgia election machines skirt accountability, 11Alive (July 30, 2019, 7:19 PM), <https://www.11alive.com/article/news/critics-new-georgia-election-machines-skirt-accountability/85-efe544c1-94e7-42c7-b8d5-26cfe879596d>.

²¹ Emil Moffatt, *New Georgia Voting Machines Come With The Promise Of Trust. But Can They Deliver?*, WABE (Mar. 10, 2020), <https://www.wabe.org/new-georgia-voting-machines-come-with-the-promise-of-trust-but-can-they-deliver/>. Indeed, this issue has been inherent to electronic voting machines for over a decade. See Jennifer Cohn, *How New Voting Machines Could Hack Our*

F. Supp. 3d at 1341 n.10. The Defendants accept and tacitly admit this problem.²²

In other words, just as with the GEMS/DRE system this Court already found

Democracy, N.Y. Review of Books (Dec. 17, 2019), <https://www.nybooks.com/daily/2019/12/17/how-new-voting-machines-could-hack-our-democracy/> (“In 2008, Professor Doug Jones of the University of Iowa conducted a study that found, in a mock election, one third of voters instructed to verify a voting machine review screen did not notice that the screen had switched their selections at the top of the ticket from Obama to McCain (or vice versa). And a majority of those who did notice assumed that the discrepancy was caused by their own error in using the machine, as opposed to a problem with the machine itself.”); *see also* Mark Niese, *Georgia election officials approve computer recounts of paper ballots*, Atlanta Journal-Constitution (Mar. 1, 2020), <https://www.ajc.com/news/state--regional-govt--politics/georgia-election-officials-approve-computer-recounts-paper-ballots/UmZhsoi3Fbg4PutT1xSNmJ/> (potential voter noting that “I cannot read a QR code . . . It’s impossible for a human to comprehend. I will never truly know whether my vote, the vote I intended to cast, will be counted.”); Mark Niese, *Georgia House passes bill for new voting machines with paper ballots*, Atlanta Journal-Constitution (Feb. 26, 2019), <https://www.ajc.com/news/state--regional-govt--politics/georgia-house-passes-bill-for-new-voting-machines-with-paper-ballots/Zk42OXOotf0S6MKwk8R5KM/> (State Representative Jasmine Clark noted similar concerns “Bar codes are changeable and hackable, and the voter could not be sure that what was on the summary was actually what was counted.”).

²² Justin Gray, *Georgia’s new paper ballots: Security upgrade or security risk?*, WSB-TV (Feb. 19, 2020, 10:29 AM), <https://www.wsbtv.com/news/local/georgias-new-paper-ballots-security-upgrade-or-security-risk/QUEAEUOLSBDOBODD4UP3DZMEMY/> (When asked “what do you say to people who have these concerns about the QR code . . . That they could be vulnerable to hackers, somebody could change that and we’d never know it,” Georgia Secretary of State Brad Raffensperger provided a familiar refrain suggesting that the Georgia could remedy this flaw with audits “[t]hat’s why we do system check, system check, system check, and that’s why the audit then also points that out . . . [w]hen we do an audit this is what we look at, we do not do audit the bar code. we look at the actual selections.”)

unconstitutional, the current election system prevents voters from verifying that their votes are actually what they intended.

Like any computer, a BMD is vulnerable to intentional forms of manipulation (such as hacking, installation of malware, or alteration of installed software), as well as unintentional forms of manipulation or corruption. (Halderman Decl. ¶¶ 7-17.) Indeed, specific vulnerabilities have been identified with Dominion’s election software and hardware. Dominion admitted that the device relies on software released in February 2015, which has not received security updates *since March 2018*. (Halderman Decl. ¶ 17.) As of August 2020, *it contains 254 documented vulnerabilities. (Id.)*

Dominion’s vulnerabilities have also been exposed in practice. In February 2019, Texas voting system examiners refused to certify Dominion’s election management system due to a number of problems with software and equipment, including the fact that Dominion’s hardware could be connected to the internet.²³ (Hurley Letter at 2-5; Halderman Decl. ¶¶ 19-20.) And, during the 2019 “DEF CON Voting Machine Hacking Village,” participating hackers probed a Dominion

²³ Dkt. No. 586 at 20 (citing Tex. Sec’y of State, *January 16-17, 2019 – Examiner Reports of Dominion Voting System Democracy Suite 5.5*, https://www.sos.texas.gov/elections/laws/jan2019_dominion.shtml (last visited Aug. 19, 2020)).

ImageCast Precinct device, in the same line of equipment that will be used in the election system.²⁴ Participants identified numerous vulnerabilities in the application, and even loaded an operating system of their choice to the ImageCast Precinct device, using its screen to play the video game “Pong.” (DEF CON Report at 19.) These BMD systems thus suffer from demonstrated security vulnerabilities of the same nature as those that plagued Georgia’s GEMS/DRE system.

These vulnerabilities could cause the BMDs to print QR codes that do not match what the voter entered or cause a ballot scanner to improperly tabulate votes against the intent of the voter.²⁵ And if such a manipulation occurs, a voter has no way to detect whether a QR code is inconsistent with his or her intent. (Halderman Decl. ¶ 32.)²⁶ Defendants have promised audits to ameliorate these apparent security vulnerabilities. (Dkt. No. 645-1 at 6; Dkt. No. 658 at 13-14, 22; Dkt. No. 658-3,

²⁴ Cross Decl. Ex. 3, DEF CON 27 Voting Machine Hacking Village Report (“DEF CON Report”) at 18-19.

²⁵ Andrew Appel, *Design flaw in Dominion ImageCast Evolution voting machine*, Ctr. for Info. Tech. Policy, Princeton Univ. (Oct. 16, 2018), <https://freedom-to-tinker.com/2018/10/16/design-flaw-in-dominion-imagecast-evolution-voting-machine/>.

²⁶ See also Andrew Appel, Richard DeMillo & Philip B. Stark, *Ballot-Marking Devices (BMDs) Cannot Assure the Will of the Voters*, Social Science Research Network (Dec. 27, 2019, last revised Jan. 4, 2020), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3375755 [hereinafter Appel et al..].)

Gilbert Decl. ¶¶ 19-23; Dkt. No. 717 at 7-8.) But Georgia law does not require and there is no record that Defendants have committed to the kind of audits necessary to detect an attack of this kind. (Halderman Decl. ¶¶ 34-35.) Meanwhile, Georgia's election system faces a high risk of being targeted by sophisticated adversaries, including Russia and other hostile foreign governments, again. (Halderman Decl. ¶¶ 11, 59-60.) In this environment, Georgia's BMD-based election system does not achieve the level of security necessary to withstand an attack by sophisticated adversaries—it suffers from severe security risks much like those of the DRE-based election system. (Halderman Decl. ¶ 5.)

Voter behavior compounds the inability to verify vote results under the election system. Even if the QR code is consistent with the text summary, both may still be inconsistent with the voter's intent and go undetected. Many (if not most) voters do not or cannot verify human-readable summaries produced by machines even when specifically directed to do so. (*Id.* ¶¶ 32, 42 (only 6.5% of unprompted participants in controlled experiment noticed when votes had been changed²⁷); Appel et al. at 9 (citing research that voters fail to recognize errors in ballots

²⁷ Matthew Bernhard et al., *Can Voters Detect Malicious Manipulation of Ballot Marking Devices?*, Univ. of Mich. 7 (2020), <https://jhalderm.com/pub/papers/bmd-verifiability-sp20.pdf>.

presented to them for verification or fail to recognize that the presented ballots were not theirs); *accord* Lee I at 2-3.)

Any attack upon such a system would be highly difficult, and perhaps impossible, to detect. On those occasions where voters do notice a discrepancy, research suggests that they are far more likely to attribute it to their own mistake.²⁸ It is unlikely a sufficient number of voters would complain; thus, poll workers would be unlikely to notice a systemic failure or manipulation. (Halderman Decl. ¶ 42.) Even the Defendants' own election security expert, Dr. Shamos, advised against the current election system, testifying that if a BMD is going to be used at all, the BMD should not use a QR code. (Dkt. No. 554, Shamos Dep. at 56:13-57:2, 57:13-21.)

The unreliable use of the BMD system further evidences the need for HMPBs. Georgia voters were harmed by the long lines and technical problems encountered in the June 9, 2020 elections. (Franzoni Decl. ¶¶ 8-9.) Problems with system reliability at multiple levels caused unacceptable delays in voting and possibly disenfranchisement altogether. (Franzoni Decl. ¶ 8.) Compounding the problem, no clear procedures were implemented to permit voters to easily switch to paper ballots when the machines broke down, without an onerous, time-consuming process that increased wait times. (Franzoni Decl. ¶ 9.)

²⁸ *Id.* at 9.

In sum, the election system remains vulnerable to cyberattacks, voters have no means of verifying their individual votes, and Defendants cannot be relied upon to ensure the integrity of the system.

III. ARGUMENT

Plaintiffs readily meet the requirements necessary for this Court to issue a preliminary injunction. *See League of Women Voters of Fla.*, 314 F. Supp. 3d at 1215 (citing *Siegel v. LePore*, 234 F.3d 1163, 1176 (11th Cir. 2000)). Plaintiffs are likely to succeed again in proving a violation of the Equal Protection and Due Process Clauses of the Fourteenth Amendment. U.S. Const. amend. XIV, § 1. BMD-generated QR code ballots impose an unconstitutional burden, given the unverifiable nature of such a system, the myriad flaws in Georgia’s hasty implementation and use of that system, and the persistent threats of hacking and vote manipulation in today’s environment.²⁹

Defendants must show a compelling state interest in the use of the election system to justify this severe burden. They cannot. In fact, they can offer no need—

²⁹ As this Court lamented in its August 15, 2019 order, “the Secretary of State’s efforts in monitoring the security of its voting systems have been lax at best – a clear indication that Georgia’s computerized election system is vulnerable in actual use.” *Curling II*, 397 F. Supp. 3d at 1359. Continuing to rely on a voting system necessarily dependent on the security and functionality of computer software introduces unnecessary insecurity and unreliability into Georgia’s elections.

or reason at all—for using computer-generated, unreadable QR codes to tabulate votes. Moreover, such a system undermines important state interests in preventing fraud and promoting voter confidence. The State’s own expert in this case and the lone cybersecurity expert on the State’s Secure, Accessible, Fair Elections (“SAFE”) Commission each expressly advised against the use of BMDs and election systems relying on QR-coded ballots. (Dkt. No. 554 at 57:14-21 (Q: “You agree that if a BMD is going to be used, the more reliable approach is one that is readable by the human voter, and that what’s going to get tallied is what they can actually read themselves; is that fair?” [Objection] A: Yes, I agree.”).)³⁰

As before, the other preliminary injunction factors favor Curling Plaintiffs as well. They will unquestionably suffer irreparable injury absent relief—such injury

³⁰ See also Lee I at 2 (“[T]o have a voter cast his vote on a [BMD] with a cyber component, and print out a paper receipt that the voter would verify” is “much less desirable” than “hand-marked paper ballots, [where] a voter both casts and verifies” his or her selections, in part because the BMD “may have a vulnerability that could be exploited to change votes.”). Post-election audits do not alleviate Dr. Lee’s concerns: “A manual count absolutely cannot rely upon a QR code, QR code, or any other kind of encoding scheme that is readable only by a machine because the cyber system that reads those codes also can be compromised and lie to the voter or auditor.” (*Id.* at 2; see also Dkt. No. 615-3 at 2 (“[I]t is meaningless to perform a post-election audit on printouts that cannot be guaranteed to be valid in the first place; the audit would just be ‘garbage-in, garbage-out,’ and perhaps worse, give a false sense of accuracy or legitimacy of the election results.”); Dkt. No. 554 at 57:23-58:12.)

is presumed in cases involving the right to vote. Because the injury to Curling Plaintiffs far outweighs any injury to the State Defendants in not implementing the election system and because the public interest favors an injunction, injunctive relief should issue.

In its August 6, 2020 Notice of Supplemental Authority (Dkt. No. 766), the Defendants misconstrue such as *Republican National Committee v. Democratic National Committee*, 140 S. Ct. 1205 (2020) (“*RNC*”) and *Purcell v. Gonzalez*, 549 U.S. 1 (2006), and invite the Court to do the same. For example, Defendants invoke *RNC* to support their position that the Court should not intervene to alter “election rules on the eve of an election.” (Dkt. No. 766 at 3.) As a threshold matter, neither *RNC* nor *Purcell* authorizes a state to foist an unconstitutional voting system on its residents. The Supreme Court has adopted no rule barring courts from stopping such violations, even on the eve of an election. Voters always enjoy the right to secure, verifiable elections.

Moreover, the circumstances of *RNC* are vastly different than those presented here. First, the court in *RNC* ordered relief that the plaintiffs in that case did not request. In *RNC*, a district court in Wisconsin “unilaterally ordered that absentee ballots mailed and postmarked after election day” still be counted so long as they were received six days later, even though the Plaintiffs did not request this relief.

140 S. Ct. at 1207. The Supreme Court found this “a critical point.” *Id.* Second, the Curling Plaintiffs do not seek any changes to the dates for the upcoming elections, nor do they seek relief related to absentee ballots at all. Finally, the stay in that case was handed down less than a week before the relevant election. *Id.* at 1206-07. In *RNC*, the Court simply addressed an abuse of discretion in ordering overly-expansive extraordinary relief based on the specific facts of that case.

Defendants similarly misconstrue *Purcell*. (Dkt. No. 766 at 3.) In *Purcell*, the plaintiffs filed suit opposing voter identification procedures in Arizona, and the district court denied the injunction in an order that made no factual or legal findings. 549 U.S. at 2-3. On appeal, the Ninth Circuit issued a temporary injunction pending the result of the appeal without providing any findings of fact or reasoning for its decision. *Id.* at 3. Soon after, the district court found that the plaintiffs did not have a likelihood of success and were not entitled to an injunction. *Id.* at 4. But because the stay was pending at the Ninth Circuit, however, the injunction pending appeal remained in place. *Id.* at 4-5. The Court took no position on the merits of the case, but instead determined that the Ninth Circuit should have given deference to the district court, which it did not do in its injunction. *Id.* at 8. This unusual nature of this case renders it inapposite.

The relief Curling Plaintiffs seek also enhances voter safety. The COVID-19 pandemic requires extensive public safety measures to prevent community spread of this deadly disease. These measures include social distancing, one-time-use products, and protective equipment.³¹ HMPBs help prevent community spread and protect voters and poll workers. They are one-time use, unlike touchscreens, which can harbor the COVID-19 virus and require disinfection.³² Additionally, paper ballots are unlikely to create the long lines and crowded conditions caused by the malfunction and shortage of BMD machines in the June 2020 elections; with a BMD system, only one person can use a BMD at a time, but with a paper ballot, positions are limited only by the number of dividers and private locations to vote. (*See, e.g.*, Franzoni Decl. ¶ 8.) Finally, it is far easier to set up polling locations that are socially distanced using HMPBs, which require only a flat surface and cardboard privacy dividers to record votes.

A. Curling Plaintiffs Are Likely to Succeed on the Merits

1. *Curling Plaintiffs Have Standing*

Each Curling Plaintiff meets the requirements for standing: (1) each has

³¹ Ctrs. for Disease Control & Prevention, *Considerations for Election Polling Locations* (June 22, 2020), <https://www.cdc.gov/coronavirus/2019-ncov/community/election-polling-locations.html>.

³² *Id.*

suffered—and faces an imminent prospect of suffering in the future—invasions of their right to vote resulting in “concrete and particularized” injuries; (2) their injuries were caused by Defendant’s actions; and (3) their injuries or threat of injuries are likely to be redressed by the relief they seek. *Common Cause/Ga. v. Billups*, 554 F.3d 1340, 1349 (11th Cir. 2009).

The Court found Curling Plaintiffs had standing for their claims in September 2018 and August 2019. *Curling v. Kemp*, 334 F. Supp. 3d 1303, 1314-18 (N.D. Ga. 2018) (“*Curling I*”); *Curling II*, 397 F. Supp. 3d at 1342-47. The Court once again addressed this issue in a detailed analysis just a few weeks ago, “find[ing] that Plaintiffs have sufficiently alleged standing.” (Dkt. No. 751 at 12-20.) For the November 3, 2020 presidential election, each Plaintiff will be required either to vote in-person using BMDs producing QR-coded ballots or to go through the burdensome process of voting absentee. Curling Plaintiffs have a “fundamental right to participate in an election process that accurately and reliably records their votes and protects the privacy of their votes and personal information.” *Curling I*, 334 F. Supp. 3d at 1315. They each therefore suffer imminent and actual harm so long as BMDs are the method of in-person voting in Georgia because each plans to vote in 2020 elections. (Curling Decl. ¶ 4; Price Decl. ¶ 4; Schoenberg Decl. ¶ 4.) Defendants’ use of the election system is also the cause of Curling Plaintiffs’ respective injuries.

Finally, as with injuries inflicted by Defendants' use of the GEMS/DRE system, the Court is able to redress Curling Plaintiffs' injuries attributable to the use of BMDs.

Thus, each of the Curling Plaintiffs has standing to seek such relief.³³

2. *Curling Plaintiffs Are Likely to Succeed on Their Constitutional Claims*

“Voting is, indisputably, a right of the most fundamental significance under our constitutional structure.” *Burdick v. Takushi*, 504 U.S. 428, 433 (1992) (internal quotation marks and citation omitted). In evaluating a state's election law imposing restrictions on the right to vote, courts utilize a “sliding-scale balancing analysis.” *League of Women Voters of Fla.*, 314 F. Supp. 3d at 1215.³⁴ The Court “must weigh ‘the character and magnitude of the asserted injury to the . . . rights that the plaintiff seeks to vindicate against the precise interests put forward by the State as justification for the burden imposed by its rule,’” and the extent to which those interests make the burden necessary. *Burdick*, 504 U.S. at 434 (quoting *Anderson v. Celebrezze*, 460 U.S. 780, 789 (1983)). Where, as here, the burden on the right to

³³ The Court has already ruled that State Defendants are proper parties to this lawsuit. *Curling II*, 397 F. Supp. 3d at 1346-47.

³⁴ Because courts have applied the *Anderson- Burdick* test to claims involving the right to vote under both the Equal Protection and Due Process Clauses, Curling Plaintiffs address both claims together for purposes of seeking injunctive relief. *See, e.g., League of Women Voters of Fla.*, 314 F. Supp. 3d at 1215 (applying *Anderson- Burdick* to claims asserted under First and Fourteenth Amendments).

vote is severe, Defendants must show a compelling state interest that justifies the burden imposed, and the restriction must be narrowly tailored to that interest. *League of Women Voters of Fla.*, 314 F. Supp. 3d at 1215.

Defendants' intended use of BMDs severely burdens Curling Plaintiffs' exercise of their right to vote. The election system maintains serious security flaws at every level, including: (1) machines that both are susceptible to viruses and other malicious code and produce results that cannot be effectively audited; (2) memory devices and data transfer methods that can be easily compromised and used as vehicles for malicious code;³⁵ and (3) ballots that the voter cannot verify accurately reflect his or her choices. (Dkt. No. 387-2 at ¶¶ 12-13; Appel et al. *passim*.) It is also likely that an attack would be undetectable, because the State has declined to forensically examine its own systems to look for one. *Curling II*, 397 F. Supp. 3d at 1364, 1367. The lack of adequate computer security measures, including proper software hygiene, hardware control, and operator practices is obvious, apparent, and documented.

³⁵ Halderman Decl. ¶¶ 10-11 (“The BMD-based election system is at further heightened risk of attack because of the legacy of poor security in Georgia’s old DRE-based election system and its associated computers and networks All these components continue to be used with the new voting system, including to process data that is copied to polling-place equipment. If attackers breached any of them to attack the DRE-based system, those attackers may continue to have such access under the BMD-based system.”)

As the Court has previously noted, it must not “review such claims in a vacuum but do so with a focus on the real-world justifications and implications of [Defendants’] decision[s].” *Stewart v. Blackwell*, 444 F.3d 843, 876 (6th Cir. 2006); *see* Dkt. No. 375 at 41. The Court found that U.S. and Georgia elections alike are targets of hackers seeking to disrupt the voting process. *Curling II*, 397 F. Supp. 3d at 1355-58 (discussing NAS Report and SSCI Report findings). Defendants’ well-established, neglectful attitude toward security and evasive conduct adds an additional burden on Curling Plaintiffs’ rights. *Id.* at 1367-68 (“Georgia’s election system is not in fact an impenetrable secure air gapped system safe from intrusion or an advanced persistent threat.”). Indeed, as the 2020 elections draw near, the evidence is clear: bad actors are attempting to compromise elections in the United States once again.³⁶ Inherent risk, actual threat, persistent and stubborn inaction—

³⁶ *See* U.S. Office of the Dir. of Nat’l Intelligence, *Statement by NCSC Director William Evanina: Election Threat Update for the American Public* (Aug. 7, 2020, 1:07 PM), <https://www.dni.gov/index.php/newsroom/press-releases/item/2139-statement-by-ncsc-director-william-ewanina-election-threat-update-for-the-american-public> (“Ahead of the 2020 U.S. elections, foreign states . . . may also seek to compromise our election infrastructure for a range of possible purposes, such as interfering with the voting process, stealing sensitive data, or calling into question the validity of the election results.”); *see also* Julian E. Barnes, *Russia Continues Interfering in Election to Try to Help Trump*, *U.S. Intelligence Says*, *N.Y. Times* (Aug. 7, 2020), <https://www.nytimes.com/2020/08/07/us/politics/russia-china-trump-biden-election-interference.html> (“The director has basically put the American people on notice that Russia in particular, also China and Iran, are going to be trying to

all compound the burden on Curling Plaintiffs’ right to vote.

Georgia’s decision to use BMDs and ballot scanners using QR codes to tabulate votes is unsecure and unreliable. (Halderman Decl. ¶¶ 7-12, 41.) The election system prevents auditability because an auditor cannot determine whether the machines truly captured the voters’ intent: a human auditor cannot read the QR code, and most voters as an empirical matter do not or cannot verify the written summary accompanying the QR code under election conditions. (Halderman Decl. ¶¶ 7, 41.) And even if voters could reliably and consistently verify the human-readable portion of BMD-generated ballots, that would do them no good since the QR codes may reflect different selections. There is no guarantee, whether due to miscoding, firmware malfunction, hacking, or other error that the QR codes read by scanners match the text summary provided elsewhere on the ballot. Thus, Georgia’s current election system cannot produce an auditable record—as confirmed with the recent pilot “audit” in Fulton County.

meddle in this election and undermine our democratic system”); Office of the Spokesperson, *Rewards for Justice – Reward Offer for Information on Foreign Interference in U.S. Elections*, U.S. Dep’t of State (Aug. 5, 2020), <https://www.state.gov/rewards-for-justice-reward-offer-for-information-on-foreign-interference-in-u-s-elections/> (United States Department of State Reward of up to \$10 million “for information leading to the identification or location of any person who works with or for a foreign government for the purpose of interfering with U.S. elections through certain illegal cyber activities.”).

Defendants cannot impose the aforementioned burdens on Plaintiffs absent significant, “precise” interests that “explain why it is necessary to burden the plaintiff’s rights” and show that the burden is narrowly tailored to further that interest. *League of Women Voters of Fla.*, 314 F. Supp. 3d at 1220 (internal quotation marks and citation omitted). Defendants have not, nor can they, articulate any such interests. Finally, “[a]dministrative convenience is simply not a compelling justification in light of the fundamental nature of the right.” *Stewart*, 444 F.3d at 869 (citing *Frontiero v. Richardson*, 411 U.S. 677, 690 (1973) (plurality)).

Thus, Curling Plaintiffs are likely to succeed on the merits of their claims.

B. Curling Plaintiffs Will Unquestionably Suffer Irreparable Injury Absent Court Intervention

The continued injury burdening and depriving Georgia electors of their respective fundamental rights to vote is irreparable. *Curling II*, 397 F. Supp. 3d at 1401-02; see *League of Women Voters of N.C. v North Carolina*, 769 F.3d 224, 247 (4th Cir. 2014) (holding that impairment of right to vote cannot be undone or adequately redressed once an election occurs). Georgia’s current election system imminently and irreparably harms Curling Plaintiffs, “even if such conduct does not completely deny Plaintiffs the right to vote.” *Curling I*, 334 F. Supp. 3d at 1322 (citation omitted).

This system is unconstitutional much like the condemned GEMS/DRE system. As this Court has acknowledged, use of an election system that threatens Curling Plaintiffs' votes will not be counted accurately or equally in upcoming elections constitutes "real risk of suffering [of] irreparable injury without court intervention." *Curling I*, 334 F. Supp. 3d at 1325-26. The same finding is warranted here because the election system poses the same threat. The threat to Curling Plaintiffs' right to vote, let alone to voter confidence, has not changed since the State implemented the new election system. Not only was the implementation rushed and incompetently managed, but Georgia voters at large were directly injured, standing in—or worse, forced to abandon—long lines for hours due to equipment failures.³⁷ The resulting national news coverage documented the Defendants' failure to successfully deploy the election system and its inability to switch to paper ballots when the system did not meet expectations.³⁸ There is no reason to expect different events this fall.

³⁷ Paul Steinhauser & Marisa Schultz, *Georgia officials clash as long lines, voting machine problems plague primary day*, Fox News (June 9, 2020), <https://www.foxnews.com/politics/georgia-long-lines-primary>.

³⁸ Sam Levine & Suman Naishadham, *Georgia primary blighted by long lines and broken voting machines*, The Guardian (June 9, 2020, 1:52 PM), <https://www.theguardian.com/us-news/2020/jun/09/georgia-election-primary-long-lines-broken-voting-machines>.

C. Balancing the Equities and Considering the Public Interest Heavily Favor Injunctive Relief

Any burden injunctive relief would place on Defendants is far outweighed by the ongoing injury to Curling Plaintiffs if relief is not granted. Curling Plaintiffs have shown, and this Court has recognized, the “threat of real harms” to the constitutional interests at stake in this case. *Curling I*, 334 F. Supp. 3d at 1326. The injunction Curling Plaintiffs seek would remedy known, preventable risks that election interference or machine errors may alter or eliminate their votes entirely. (Curling Decl. ¶ 8; Price Decl. ¶ 12; Schoenberg Decl. ¶ 11.) A preliminary injunction is in the public interest because it would enhance the integrity and credibility of the electoral processes that are “essential to the functioning of our participatory democracy.” *Purcell v. Gonzalez*, 549 U.S. 1, 4 (2006). Indeed, the widespread problems exhibited during the June 2020 elections brought this interest into stark relief. (Franzoni Decl. ¶¶ 6-10.)

Defendants cannot credibly demonstrate injury resulting from the requested relief. The cost and time it would take for Defendants to implement HMPBs do not outweigh Curling Plaintiffs’ significant constitutional interests. Officials and poll workers would require some minor additional training.

These measures are not “injury” but simply the duties of office, performed without complaint or controversy in other precincts in the United States. In fact, the

Defendants have already prepared themselves for extensive use of HMPBs because they are required to do so under Georgia law. Pursuant to the rules of the Georgia State Election Board, the Defendants are required to provide HMPBs in exigent circumstances, which may include moments in which wait times exceed 30 minutes. State Election Board Rule 183-1-12-.11(2)(c)-(d). Next, Georgia's precinct-based scanners already have the capability to count hand-marked paper ballots, leaving no additional burden. (Halderman Decl. ¶ 4.) Lastly, Defendants' intransigence despite this Court's repeated findings that the State abrogated its responsibilities to protect Georgia's election system, lacked competence, and, eventually, even candor to the tribunal undermines any assertion of state interests in safeguarding voter confidence and preserving election integrity.

The State's quixotic fixation on the BMD system ignores the simpler solution that remedies all of these problems: hand-marked paper ballots for all who can feasibly use them. There is no reason why these burdens on Georgia voters should continue when a less restrictive (and far less expensive) alternative is readily available. Much of the Dominion equipment can be repurposed for use in a constitutional manner. As the Court has acknowledged, the State's RFP initially called for "rapid full ballot image/ballot counting scanners for absentee and provisional ballots." *Curling II*, 397 F. Supp. 3d at 1341 n.10. The already-

purchased Dominion precinct and central scanners are capable of counting hand-marked paper ballots, like those that voters will continue to use when voting absentee by mail or voting provisionally. (Contract, §§ 4-5 (pp. 54-55) (describing central and precinct scanner capacity to, *inter alia*, interpret voter marks on a paper ballot and to capture scanned images of ballot and to record text showing each mark as interpreted by the scanner); Halderman Decl. ¶ 4.) This capacity to scan full-face HMPBs was specifically promoted by Dominion and by State Defendants. Pivoting to this method now would not require significant reinvestment.

Georgia can convert to an auditable, accountable system of voter-verified HMPBs, using much of the same equipment it has already purchased. The injury to Curling Plaintiffs significantly outweighs any injury to the State Defendants in implementing human-readable HMPBs. An injunction is unquestionably in the public's interest, given the well-documented problems of the Dominion system. Injunctive relief therefore should issue without delay.

IV. REQUESTED RELIEF

The vulnerabilities demonstrated by Curling Plaintiffs and the supporting evidence offered by election security experts throughout this litigation show that the election system violates the Fourteenth Amendment to the U.S. Constitution. Georgia elections must not evade scrutiny and auditability for another election.

Thus, Curling Plaintiffs request that the Court:

1. Declare that Defendants have violated the Fourteenth Amendment to the U.S. Constitution and 42 U.S.C. § 1983;
2. Order injunctive relief prohibiting Defendants, from using any system or devices for voting, including, but not limited to, the BMD-based election system, that does not use hand-marked paper ballots as the primary method of recording the elector's votes;
3. Award Curling Plaintiffs their attorneys' fees and costs under 42 U.S.C. § 1988 for the deprivation of civil rights arising from Defendants' attempted use of the election system, causing 42 U.S.C. § 1983 violations; and
4. Grant all other relief this Court deems proper.

Dated: August 19, 2020

Respectfully submitted,

/s/ David D. Cross

David D. Cross (*pro hac vice*)

John P. Carlin (*pro hac vice*)

Robert W. Manoso (*pro hac vice*)

Lyle F. Hedgecock (*pro hac vice*)

Mary G. Kaiser (*pro hac vice*)

MORRISON & FOERSTER LLP

2000 Pennsylvania Avenue, NW

Suite 6000

Washington, DC 20006

Telephone: (202) 887-1500

DCross@mofocom

JCarlin@mofocom

RManoso@mofocom

Halsey G. Knapp, Jr.

GA Bar No. 425320

Adam M. Sparks

GA Bar No. 341578
KREVOLIN & HORST, LLC
1201 West Peachtree Street, NW
Suite 3250
Atlanta, GA 30309
HKnapp@khlawfirm.com
Sparks@khlawfirm.com

*Counsel for Plaintiffs Donna Curling,
Donna Price & Jeffrey Schoenberg*

**IN THE UNITED STATES DISTRICT COURT
FOR THE NORTHERN DISTRICT OF GEORGIA
ATLANTA DIVISION**

**DONNA CURLING, ET AL.,
Plaintiffs,**

v.

**BRAD RAFFENSPERGER, ET AL.,
Defendants.**

Civil Action No. 1:17-CV-2989-AT

CERTIFICATE OF COMPLIANCE

Pursuant to LR 7.1(D), I hereby certify that the foregoing document has been prepared in accordance with the font type and margin requirements of LR 5.1, using font type of Times New Roman and a point size of 14.

/s/ David D. Cross
David D. Cross

**IN THE UNITED STATES DISTRICT COURT
FOR THE NORTHERN DISTRICT OF GEORGIA
ATLANTA DIVISION**

**DONNA CURLING, ET AL.,
Plaintiffs,**

v.

**BRAD RAFFENSPERGER, ET AL.,
Defendants.**

Civil Action No. 1:17-CV-2989-AT

CERTIFICATE OF SERVICE

I hereby certify that on August 19, 2020, a copy of the foregoing **CURLING PLAINTIFFS' MEMORANDUM IN SUPPORT OF MOTION FOR PRELIMINARY INJUNCTION** was electronically filed with the Clerk of Court using the CM/ECF system, which will automatically send notification of such filing to all attorneys of record.

/s/ David D. Cross
David D. Cross