SENATE BILL 810

S2, E4, C5 2lr2965

By: Senator Hester

Introduced and read first time: February 7, 2022

Assigned to: Finance

A BILL ENTITLED

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ı	A N	A(7)	concerning
_	,		COLLOCITITIES

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Cybersecurity – Critical Infrastructure and Public Service Companies (Critical Infrastructure Security Act of 2022)

- 4 FOR the purpose of authorizing the Department of Emergency Management to take action 5 to reduce the disaster risk and vulnerability of critical infrastructure; establishing 6 the Critical Infrastructure Cybersecurity Grant Program in the Department to 7 leverage certain funds to make cybersecurity improvements to critical 8 infrastructure; altering the duties and staffing requirements of the Public Service 9 Commission to include cybersecurity; authorizing the Office of People's Counsel to retain or hire an expert in cybersecurity; requiring certain public service companies 10 11 to adopt certain cybersecurity best practices, protect certain information, include 12 certain language in certain contracts, and establish certain security standards for 13 certain technology devices, data, and personally identifiable information; requiring certain regulations on service quality and reliability standards for electric companies 14 and gas companies to include cyber resiliency; and generally relating to cybersecurity 15 16 risk protection of critical infrastructure and public service companies.
- 17 BY repealing and reenacting, with amendments,
- 18 Article Public Safety
- 19 Section 14–101, 14–102(a), and 14–103
- 20 Annotated Code of Maryland
- 21 (2018 Replacement Volume and 2021 Supplement)
- 22 BY adding to
- 23 Article Public Safety
- 24 Section 14–118
- 25 Annotated Code of Maryland
- 26 (2018 Replacement Volume and 2021 Supplement)
- 27 BY repealing and reenacting, without amendments,
- 28 Article Public Utilities



1 2 3	Section 1–101(a) and 7–213(d) Annotated Code of Maryland (2020 Replacement Volume and 2021 Supplement)				
4 5 6 7 8	BY adding to Article – Public Utilities Section 1–101(h–1) through (h–3) and 5–305 Annotated Code of Maryland (2020 Replacement Volume and 2021 Supplement)				
9 10 11 12	BY repealing and reenacting, with amendments, Article – Public Utilities Section 2–108(d), 2–113(a), 2–203(f), and 7–213(e)(1) Annotated Code of Maryland (2020 Replacement Volume and 2021 Supplement)				
$\frac{14}{5}$	SECTION 1. BE IT ENACTED BY THE GENERAL ASSEMBLY OF MARYLAND, That the Laws of Maryland read as follows:				
6	Article – Public Safety				
17	14–101.				
18	(a) In this title the following words have the meanings indicated.				
19 20 21 22	(B) "CRITICAL INFRASTRUCTURE" MEANS SYSTEMS AND ASSETS, WHETHER PHYSICAL OR VIRTUAL, THAT ARE SO VITAL TO THE STATE THAT THE INCAPACITY OR DESTRUCTION OF THE SYSTEM OR ASSET WOULD HAVE A DEBILITATING IMPACT ON ANY ONE OR COMBINATION OF THE FOLLOWING:				
23	(1) SECURITY;				
24	(2) ECONOMIC SECURITY;				
25	(3) PUBLIC HEALTH; OR				
26	(4) PUBLIC SAFETY.				
27 28 29 30	(C) (1) "CYBERSECURITY" MEANS PROCESSES OR CAPABILITIES IN WHICH SYSTEMS, COMMUNICATIONS, AND INFORMATION ARE PROTECTED AND DEFENDED AGAINST DAMAGE, UNAUTHORIZED USE OR MODIFICATION, AND EXPLOITATION.				

(2) "CYBERSECURITY" INCLUDES PROTECTING THE AVAILABILITY,

INTEGRITY, AUTHENTICATION, CONFIDENTIALITY, AND NONREPUDIATION OF

1 INFORMATION.

- 2 [(b)] (D) "Department" means the Maryland Department of Emergency 3 Management.
- [(c)] (E) "Emergency" means the imminent threat or occurrence of severe or widespread loss of life, injury, or other health impacts, property damage or destruction, social or economic disruption, or environmental degradation from natural, technological, or human-made causes.
- [(d)] (F) (1) "Emergency management" means the planning, implementing, and conducting of risk reduction and consequence management activities across the mission areas of prevention, protection, mitigation, response, and recovery to enhance preparedness, save lives, preserve public health and safety, protect public and private property, and minimize or repair injury and damage that results or may result from emergencies.
- 14 (2) "Emergency management" does not include the preparation for and carrying out of functions in an emergency for which military forces are primarily 16 responsible.
- 17 **[(e)] (G)** "Local organization for emergency management" means an 18 organization established by a political subdivision or other local authority under § 14–109 of this subtitle.
- 20 [(f)] **(H)** "Political subdivision" means a county or municipal corporation of the 21 State.
- [(g)] (I) "Secretary" means the Secretary of Emergency Management.
- 23 (J) "SECURITY BY DESIGN" MEANS THE CONSIDERATION OF 24 CYBERSECURITY RISKS IN EVERY PHASE OF A PROJECT.
- 25 [(h)] (K) "Senior elected official" means:
- 26 (1) the mayor;
- 27 (2) the county executive;
- 28 (3) for a county that does not have a county executive, the president of the 29 board of county commissioners or county council or other chief executive officer of the 30 county; or
- 31 (4) for a municipal corporation that does not have a mayor, the burgess, 32 chairperson, or president of the municipal governing body or other chief executive officer of 33 the municipal corporation.

(i)

1	14–102.
2 3 4 5	(a) To ensure that the State will be adequately prepared to deal with emergencies, to protect the public peace, health, and safety in the State, to preserve the lives and property of the people of the State, and to ensure the social and economic resilience of the State, it is necessary to:
6	(1) establish a Maryland Department of Emergency Management;
7 8	(2) authorize the establishment of local organizations for emergency management in the political subdivisions;
9 10	(3) confer on the Governor and on the senior elected officials or governing bodies of the political subdivisions the emergency powers provided in this subtitle;
11 12	(4) provide for the rendering of mutual aid among the political subdivisions and with other states in carrying out emergency management functions; [and]
13 14 15 16	(5) authorize a comprehensive emergency management system that empowers all State departments and agencies to systematically prepare for, mitigate, respond to, and recover from potential or actual emergencies through risk reduction and consequence management; AND
17 18	(6) AUTHORIZE THE DEPARTMENT TO ESTABLISH A GRANT PROGRAM FOR THE PROTECTION OF CRITICAL INFRASTRUCTURE.
19	14–103.
20 21	(a) There is a Maryland Department of Emergency Management established as a principal department of the Executive Branch of State government.
22 23 24	(b) The Department has primary responsibility and authority for developing emergency management policies and is responsible for coordinating disaster risk reduction, consequence management, and disaster recovery activities.
25	(c) The Department may act to:
26 27	(1) reduce the disaster risk and vulnerability of persons, CRITICAL INFRASTRUCTURE, and property located in the State;
28	(2) develop and coordinate emergency planning and preparedness; and
29	(3) coordinate emergency management activities and operations:

relating to an emergency that involves two or more State

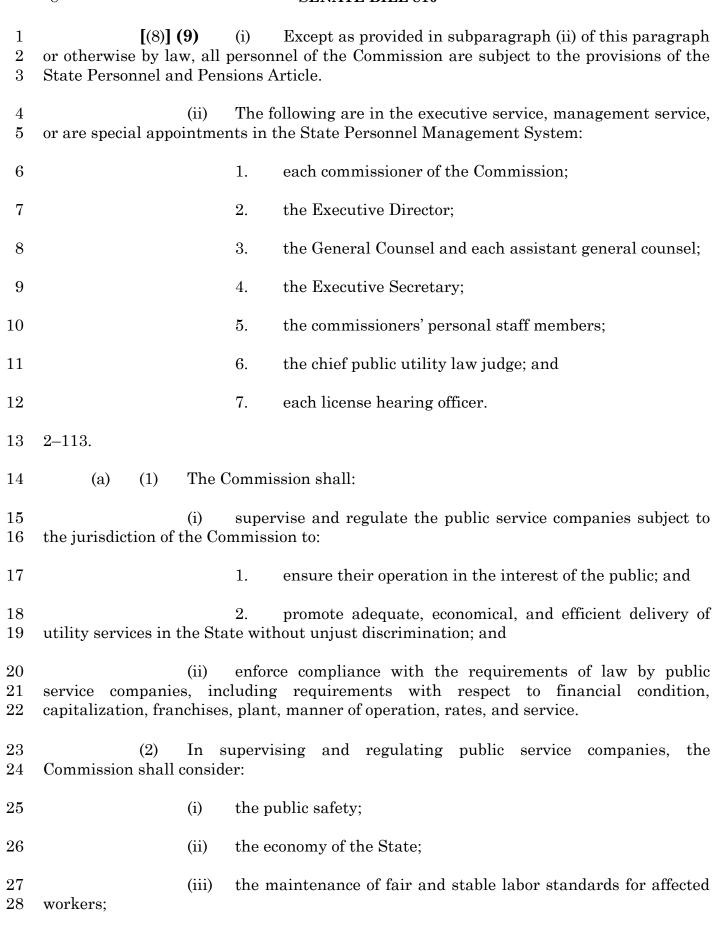
1	agencies;
2	(ii) between State agencies and political subdivisions;
3	(iii) with local governments;
4	(iv) with agencies of the federal government and other states; and
5	(v) with private and nonprofit entities.
6	14–118.
7 8	(A) IN THIS SECTION, "PROGRAM" MEANS THE CRITICAL INFRASTRUCTURE CYBERSECURITY GRANT PROGRAM.
9 10	(B) THERE IS A CRITICAL INFRASTRUCTURE CYBERSECURITY GRANT PROGRAM IN THE DEPARTMENT.
11 12 13	(C) THE PURPOSE OF THE PROGRAM IS TO LEVERAGE FUNDS AVAILABLE FROM FEDERAL, STATE, AND LOCAL GRANT PROGRAMS TO MAKE CYBERSECURITY IMPROVEMENTS TO CRITICAL INFRASTRUCTURE.
14	(D) THE DEPARTMENT SHALL:
15	(1) ADMINISTER THE PROGRAM;
16	(2) ESTABLISH APPLICATION PROCEDURES FOR THE PROGRAM; AND
17	(3) AWARD GRANTS FROM THE PROGRAM.
18 19 20	(E) (1) IN DETERMINING THE TYPES OF CYBERSECURITY IMPROVEMENTS AND RECIPIENTS ELIGIBLE FOR GRANTS UNDER THE PROGRAM, THE DEPARTMENT SHALL:
21 22	(I) CONSULT WITH ELECTRIC COMPANIES, GAS COMPANIES, WATER UTILITIES, STATE AGENCIES, AND POLITICAL SUBDIVISIONS TO:
23 24 25	1. IDENTIFY CURRENT AND FORESEEABLE CYBERSECURITY RISKS TO THE STATE'S ELECTRIC GRID, NATURAL GAS INFRASTRUCTURE, AND WATER AND SEWER SYSTEMS; AND
26 27	2. PREPARE A REPORT ON THE CYBERSECURITY RISKS IDENTIFIED UNDER ITEM 1 OF THIS ITEM;

- 1 IDENTIFY FUNDING TO FUND THE GRANTS AWARDED UNDER (II)2 THE PROGRAM; AND 3 (III) DEVELOP CRITERIA FOR SELECTING GRANT RECIPIENTS 4 BASED ON A GRANT APPLICANT'S CYBERSECURITY RISK. ON OR BEFORE DECEMBER 1, 2022, THE DEPARTMENT SHALL 5 **(2)** SUBMIT THE REPORT PREPARED UNDER PARAGRAPH (1)(I)2 OF THIS SUBSECTION 6 TO THE GOVERNOR AND, IN ACCORDANCE WITH § 2-1257 OF THE STATE 7 GOVERNMENT ARTICLE, THE GENERAL ASSEMBLY. 8 9 **(F)** THE DEPARTMENT SHALL: 10 **(1)** REQUIRE EACH GRANT RECIPIENT TO DEVELOP PROCESSES TO 11 ADDRESS CYBERSECURITY RISKS AND SUBMIT A REPORT ON IMPLEMENTED 12 PROCESSES TO THE DEPARTMENT; AND 13 **(2)** REQUIRE GRANT RECIPIENTS THAT MODERNIZE OR IMPROVE THE 14 RESILIENCE OF ELECTRIC GRIDS, NATURAL GAS INFRASTRUCTURE, OR WATER AND 15 SEWER SYSTEMS TO: 16 SUBMIT A REPORT ON IMPLEMENTED SECURITY BY DESIGN **(I)** 17 PRINCIPLES TO THE DEPARTMENT; AND ESTABLISH A CYBERSECURITY PLAN THAT ADDRESSES 18 (II)CYBERSECURITY RISKS IN POLICY, SOFTWARE DEVELOPMENT, HARDWARE, AND 19 20 NETWORKS. Article - Public Utilities 21221-101.23 In this division the following words have the meanings indicated. (a) (H-1) "CYBER RESILIENCY" MEANS THE ABILITY TO ANTICIPATE, WITHSTAND, 24 25RECOVER FROM, AND ADAPT TO ADVERSE CONDITIONS, STRESSES, ATTACKS, OR COMPROMISES ON SYSTEMS THAT USE OR ARE ENABLED BY A CYBER RESOURCE. 26 (H-2) "CYBER RESOURCE" MEANS AN INFORMATION SOURCE THAT: 27 28 CREATES, STORES, PROCESSES, MANAGES, TRANSMITS, OR **(1)**
- 30 **(2)** CAN BE ACCESSED BY A NETWORK OR BY USING NETWORKING

DISPOSES OF INFORMATION IN AN ELECTRONIC FORMAT; AND

1 METHODS.

- 2 (H-3) "Cybersecurity" has the meaning stated in § 14-101 of the 3 Public Safety Article.
- 4 2–108.
- 5 (d) (1) The State budget shall provide sufficient money for the Commission to 6 hire, develop, and organize a staff to perform the functions of the Commission, including 7 analyzing data submitted to the Commission and participating in proceedings as provided 8 in § 3–104 of this article.
- 9 (2) (i) As the Commission considers necessary, the Commission shall 10 hire experts including economists, cost of capital experts, rate design experts, accountants, 11 engineers, transportation specialists, and lawyers.
- 12 (ii) To assist in the regulation of intrastate hazardous liquid 13 pipelines under Title 11, Subtitle 2 of this article, the Commission shall include on its staff 14 at least one engineer who specializes in the storage of and the transportation of hazardous 15 liquid materials by pipeline.
- 16 (3) THE COMMISSION SHALL INCLUDE ON ITS STAFF ONE OR MORE
 17 EMPLOYEES DEDICATED TO CYBERSECURITY POLICY, STRATEGY, AUDITING, AND
 18 REPORTING.
- 19 **(4)** The Commission may retain on a case by case basis additional experts 20 as required for a particular matter.
- [(4)] (5) The lawyers who represent the Commission staff in proceedings before the Commission shall be appointed by the Commission and shall be organized and operate independently of the office of General Counsel.
- 24 [(5)] (6) (i) As required, the Commission shall hire public utility law 25 judges.
- 26 (ii) Public utility law judges are a separate organizational unit and shall report directly to the Commission.
- [(6)] (7) The Commission shall hire personal staff members for each commissioner as required to provide advice, draft proposed orders and rulings, and perform other personal staff functions.
- Subject to § 3–104 of this article, the Commission may delegate to a commissioner or personnel the authority to perform an administrative function necessary to carry out a duty of the Commission.



1	(iv) the conservation of natural resources;
2 3 4 5	(v) the preservation of environmental quality, including protection of the global climate from continued short-term and long-term warming based on the best available scientific information recognized by the Intergovernmental Panel on Climate Change; [and]
6 7 8	(vi) the achievement of the State's climate commitments for reducing statewide greenhouse gas emissions, including those specified in Title 2, Subtitle 12 of the Environment Article; AND
9 10	(V) THE CYBERSECURITY RISKS FACED BY PUBLIC SERVICE COMPANIES IN THE STATE.
11	2–203.
12 13	(f) The Office of People's Counsel may retain as necessary for a particular matter or hire experts in the field of:
14 15	(1) utility regulation, including cost of capital experts, rate design experts, accountants, economists, engineers, transportation specialists, and lawyers; [and]
16 17 18	(2) climate change, including meteorologists, oceanographers, ecologists, foresters, geologists, seismologists, botanists, and experts in any other field of science that the People's Counsel determines is necessary; AND
19	(3) CYBERSECURITY.
20	5-305.
21	(A) IN THIS SECTION, "ZERO TRUST" MEANS A CYBERSECURITY APPROACH:
22	(1) FOCUSED ON CYBERSECURITY RESOURCE PROTECTION; AND
23 24	(2) BASED ON THE PREMISE THAT TRUST IS NEVER GRANTED IMPLICITLY BUT MUST BE CONTINUALLY EVALUATED.
25 26	(B) THIS SECTION DOES NOT APPLY TO A PUBLIC SERVICE COMPANY THAT IS:
27	(1) A COMMON CARRIER; OR
28	(2) A TELEPHONE COMPANY.
29	(C) EACH PUBLIC SERVICE COMPANY SHALL:

$\frac{1}{2}$	(1) ADOPT CYBERSECURITY BEST PRACTICES, INCLUDING IMPLEMENTING ZERO TRUST PRINCIPLES;
4	IMPLEMENTING ZERO TRUST PRINCIPLES,
3	(2) PROTECT PERSONALLY IDENTIFIABLE INFORMATION OF
4	CUSTOMERS AND EMPLOYEES;
5	(3) INCLUDE IN CONTRACTS WITH THIRD-PARTY INFORMATION
6	TECHNOLOGY OR OPERATIONAL TECHNOLOGY PROVIDERS PROVISIONS REQUIRING
7	THE THIRD-PARTY PROVIDERS TO:
8	(I) COLLECT AND PRESERVE DATA FOR CYBERSECURITY
9	ANALYSIS; AND
10	(II) SHARE THAT DATA AND REPORT ANY CYBERSECURITY
11	BREACHES TO THE PUBLIC SERVICE COMPANY;
10	(4) ECTADI ICH MINIMUM CECHDIMY CTANDADDC EOD INFODMATION
12 13	(4) ESTABLISH MINIMUM SECURITY STANDARDS FOR INFORMATION TECHNOLOGY AND OPERATIONAL TECHNOLOGY DEVICES; AND
10	TECHNOLOGI AND OFERATIONAL TECHNOLOGI DEVICES, AND
14	(5) ENCRYPT AND CREATE MINIMUM SECURITY STANDARDS FOR
15	DATA AND PERSONALLY IDENTIFIABLE INFORMATION HELD BY THE PUBLIC
16	SERVICE COMPANY.
17	7–213.
18	(d) On or before July 1, 2012, the Commission shall adopt regulations that
19	implement service quality and reliability standards relating to the delivery of electricity to
20	retail customers by electric companies through their distribution systems, using:
21	(1) SAIFI;
22	(2) SAIDI; and
23	(3) any other performance measurement that the Commission determines
24	to be reasonable.
25	(e) (1) The regulations adopted under subsection (d) of this section shall:
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$\frac{26}{27}$	(i) include service quality and reliability standards, including standards relating to:
28	1. service interruption;
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downed wire response;

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1		3.	customer communications;
2		4.	vegetation management;
3		5.	periodic equipment inspections;
4		6.	annual reliability reporting; [and]
5		7.	CYBER RESILIENCY; AND
6		8.	any other standards established by the Commission;
7 8	(ii) an electric company; and	accou	nt for major outages caused by events outside the control of
9 10 11		andar	n electric company that fails to meet the applicable service ds, require the electric company to file a corrective action s the company will take to meet the standards.
12 13 14 15	the Public Service Comm	ission	FURTHER ENACTED, That on or before June 31, 2023, shall update the regulations adopted under § 7–213(d) of include service quality and reliability standards for cyber
16	SECTION 3. AND	BE IT	FURTHER ENACTED, That this Act shall take effect June

17 1, 2022.