CHAPTER 108

(SB 55)

AN ACT relating to blockchain technology.

Be it enacted by the General Assembly of the Commonwealth of Kentucky:

➔SECTION 1.   A NEW SECTION OF KRS CHAPTER 42 IS CREATED TO READ AS FOLLOWS:

(1)   As used in this section, unless the context otherwise requires:

   (a)   "Blockchain technology" means shared or distributed data structures or digital ledgers used in peer-to-peer networks that:

      1.   Store digital transactions;

      2.   Verify and secure transactions cryptographically; and

      3.   Allow automated self-execution of smart contracts;

   (b)   "Peer-to-peer networks" means computer systems that are connected to each other over the Internet so that each computer system:

      1.   Is a client and a server simultaneously; and

      2.   Allows file sharing without use of a central server;

   (c)   "Smart contract" means a computerized transaction protocol that self-executes the terms of a contract and that is integrated into the blockchain program architecture; and

   (d)   "Contract" means an agreement of the parties in fact, as found in their language or inferred from other circumstances, including course of performance, course of dealing, or usage of trade, reached through offer and mutual acceptance by the parties to be legally bound by the terms of the agreement which includes valuable consideration for all parties.

(2)   There is hereby established a Blockchain Technology Working Group which shall be attached to the Commonwealth Office of Technology for administrative purposes.

(3)   The working group shall evaluate the feasibility and efficacy of using blockchain technology to enhance the security of and increase protection for the state's critical infrastructure, including but not limited to the electric utility grid, natural gas pipelines, drinking water supply and delivery, wastewater, telecommunications, and emergency services. The workgroup shall create a priority list of critical infrastructure that could benefit from the use of blockchain technology and then determine whether:

   (a)   Blockchain fits the distributed nature of transactions;

   (b)   The peer-to-peer network is robust enough to support the use of blockchain technology;

   (c)   A cost-benefit analysis of blockchain for each case is warranted to demonstrate its value, applicability, or efficiency; and

   (d)   If the parties involved in the blockchain would agree to its usage if deployed.

(4)   The workgroup shall consist of nine (9) members, three (3) of which shall be ex officio, as follows:

   (a)   The chief information officer for the Commonwealth Office of Technology or his or her designee who shall serve as chair;

   (b)   The secretary for the Energy and Environment Cabinet or his or her designee;

   (c)   The chief information officer for the Finance and Administration Cabinet or his or her designee;

   (d)   A representative designated by the executive director of the Kentucky Public Service Commission, who has knowledge of the spatial characteristics of the infrastructure used by public utilities;

   (e)   The executive director of Kentucky Department of Homeland Security or his or her designee;

    (f)   One (1) member in academia designated by the chief information officer of the Commonwealth Office of Technology, who has expertise in blockchain technology and its applicability to different industry sectors

    (g)   One (1) ex officio member representing the Kentucky Municipal Utilities Association (KMUA) designated by the executive director of KMUA;

    (h)   One (1) ex officio member representing the investor-owned electric utilities designated by the executive director of the Kentucky Public Service Commission; and

    (i)   One (1) ex officio member representing Kentucky electric cooperatives designated by the chairman of the board of the Kentucky Association of Electric Cooperatives.

(5)   The workgroup shall be staffed by the Commonwealth Office of Technology.

(6)   The workgroup shall report to the Governor and to the Legislative Research Commission by December 1 of each year. The report shall include the current priority list and a discussion of whether blockchain could be deployed, and any associated cost-benefit analysis.

Signed by Governor April 24, 2020.