Federal Communications Commission 45 L Street NE Washington, DC 20554

News Media Information 202-418-0500 Internet: www.fcc.gov TTY: 888-835-5322

DA 24-493

Released: May 24, 2024

PUBLIC SAFETY AND HOMELAND SECURITY BUREAU SEEKS COMMENT ON THE IMPACTS OF THE MAY 2024 GEOMAGENTIC STORM ON THE U.S. COMMUNICATIONS SECTOR

PS Docket No. 24-161

Comments Due: June 24, 2024

The Federal Communications Commission's Public Safety and Homeland Security Bureau (PSHSB or Bureau) seeks comment on any observed impacts to communications that resulted from the May 2024 severe geomagnetic storm. On Thursday, May 9, 2024, the National Weather Service Space Weather Prediction Center (SWPC) issued a severe (G4) Geomagnetic Storm Watch, forecasting a series of coronal mass ejections (CMEs) that merged with the Earth's electromagnetic fields between May 7-11, 2024. On May 11, 2024, the storm reached extreme (G5) conditions, the first time this severity has been observed since 2003. According to the SWPC, CMEs are large expulsions of plasma and magnetic field from the Sun's corona. Electromagnetic currents generated by CMEs, when merged with the Earth's electromagnetic fields, may distort the propagation of radio frequency waves.

On May 11, 2024, the FCC High Frequency (HF) Direction Finding Center, which supports the public safety community and federal partners by locating interference to radio spectrum below 30 MHz, observed significant disturbance in the propagation of HF radio signals. This disturbance resulted in the disruption of voice and data communications passed over HF frequencies. To better understand the impacts of the geomagnetic storm on the U.S. communications sector, the Bureau is requesting information from communications service providers and the public regarding disruptions in communications between May 7 and 11, 2024, that it believes to be a result of the storm. The Bureau is encouraging commenters to provide any available evidence, particularly electromagnetic spectrum analyses, imagery, or chronological logs relating the storm's impacts. Where possible, the Bureau asks that commenters include the description of the impacts; make and model of affected communications equipment, which could include transmitters, receivers, transceivers, switches, routers, amplifiers etc.; make, model, and type of affected antennae and their composition; frequencies affected; type and composition of cable adjoining communications equipment and the antennae, if applicable; duration of the impact; and any residual effects observed in the hours following restoration.

¹ See Space Weather Prediction Center, National Oceanic and Atmospheric Administration, Geomagnetic Storm WATCH for May 11, 2024, https://www.swpc.noaa.gov/news/g4-watch-effect-may-11 (last visited May 16, 2024).

² See Space Weather Prediction Center, National Oceanic and Atmospheric Administration, G5 CONDITIONS OBSERVED!, https://www.swpc.noaa.gov/news/g5-conditions-observed (last visited May 16, 2024).

³ See Space Weather Prediction Center, National Oceanic and Atmospheric Administration, *Coronal Mass Ejections*, https://www.swpc.noaa.gov/phenomena/coronal-mass-ejections (last visited May 16, 2024).

Procedural Matters

Interested parties may file comments and reply comments on or before the dates indicated on the first page of this document. Comments may be filed using the FCC's Electronic Comment Filing System (ECFS).

- Commenting parties may file comments in response to this Notice in PS Docket No. 24-161.
- Electronic Filers: Comments may be filed electronically using the Internet by accessing the ECFS: https://www.fcc.gov/ecfs.
- Paper Filers: Parties who choose to file by paper must file an original and one copy of each filing.
- Filings can be sent by commercial overnight courier, or by first-class or overnight U.S. Postal Service mail. All filings must be addressed to the Commission's Secretary, Office of the Secretary, Federal Communications Commission.
- Commercial overnight mail (other than U.S. Postal Service Express Mail and Priority Mail) must be sent to 9050 Junction Drive, Annapolis Junction, MD 20701. U.S. Postal Service first-class, Express, and Priority mail must be addressed to 45 L Street NE, Washington, D.C., 20554.
- Effective March 19, 2020, and until further notice, the Commission no longer accepts any hand or messenger delivered filings. This is a temporary measure taken to help protect the health and safety of individuals, and to mitigate the transmission of COVID-19. See FCC Announces Closure of FCC Headquarters Open Window and Change in Hand-Delivery Policy, Public Notice, 35 FCC Rcd 2788 (OMD 2020), https://www.fcc.gov/document/fcc-closes-headquarters-open-window-and-changes-hand-delivery-policy.

People with Disabilities: To request materials in accessible formats for people with disabilities (braille, large print, electronic files, audio format), send an e-mail to fcc504@fcc.gov or call the Consumer and Governmental Affairs Bureau at (202) 418-0530 (voice).

Parties wishing to file materials with a claim of confidentiality should follow the procedures set forth in Section 0.459 of the FCC's rules. Casual claims of confidentiality are not accepted. Confidential submissions may not be filed via ECFS but rather should be filed with the Secretary's Office following the procedures set forth in 47 CFR § 0.459. Redacted versions of confidential submissions may be filed via ECFS. Parties are advised that the FCC looks with disfavor on claims of confidentiality for entire documents. When a claim of confidentiality is made, a public, redacted version of the document should also be filed.

We exempt the proceeding initiated by this Notice from the FCC's *ex parte* rules.⁴ This exemption serves the public interest by facilitating the full discussion of potentially sensitive matters. In the event the Commission were to take further action, any rule that the Commission were to propose would be subject to permit-but-disclose rulemaking procedures before it would be adopted, which would ensure the compilation of a full record.

For further information, contact Justin Cain, Chief, Operations and Emergency Management Division, Public Safety and Homeland Security Bureau, (202) 418-2924, justin.cain@fcc.gov.

