

2021 GEORGIA TECH FAULT AND DISTURBANCE ANALYSIS **VIRTUAL** CONFERENCE

AUTHOR'S GUIDELINES FOR FORMAT AND PRESENTATION OF PAPERS

The following guidelines are for author's who are preparing to present a paper at the 2021 Georgia Tech Fault and Disturbance Analysis Conference. **The FDA 'virtual' conference is being held from April 26 to 27, 2021 to avoid conflict with other events. Online Registration ends on 22 April 2021.** There will be no "Walk-ins" or "Day of Registrations." CD-ROMs or other paperwork will not be provided. All submitted papers and Microsoft® PowerPoint® or PDF presentation material will be available on the Georgia Tech website. Additional information on page #6.

http://www.ap-concepts.com/2021_FDA_PROCEEDINGS/proceedings.html

NOTE: Please return ACKNOWLEDGEMENT SHEET (page #8) no later than January 31, 2021 and be sure to review the ADDENDUM for using the online Hopin Event login and usage procedures.

ABSTRACT and PAPER PRESENTATION UPLOAD/REVIEW PROCESS

The initial Abstract submission is accomplished using the procedures starting on page #2 of 12 to access the Georgia Tech FDA website at http://www.ap-concepts.com/2021_FDA/ by first selecting the {Make Submission} feature shown on the next page where the following specific info must be entered;

- Check Consent check box,
- Enter Paper Title
- Enter Author Information
- Select Contact Author (and optionally an alternate author contact if applicable)
- Enter email address
- Select Paper Topic
- Enter Keywords and Abstract
- Select your password
- Enter Optional Comments if needed
- Finally, Click on Make Submission button

Please make a note of your *Password*, as well as the assigned *Submission ID* number

Upon completion of the "Make Submission" information, authors will then be provided via an email from Georgia Tech with a **Submission ID** number for future uploads and paper corrections to be used in combination with the author's selected password.

PAPER UPLOAD and REVIEW PROCESS

During the week that occurs eight weeks prior to the **26 April 2021** starting date of the FDA Conference, Authors are reminded to upload the preliminary copy of their accepted paper and Microsoft® PowerPoint® or other TRUC/GaTech conference properly formatted presentation to http://www.ap-concepts.com/2021_FDA/. Authors should have clicked on the **{Make Submission} field only once when first registering and submitting the accepted abstract.** Afterwards the authors must click on the **Upload File** link to upload revised papers, presentations, author forms and/or biographies any number of times. Each time authors re-upload a file, the previous one in the same category (paper, presentation, author form, bio etc.) is automatically deleted.

Also, if an author forgets his/her password the system can automatically send an email to the author with password recovery information.

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Upon again accessing the Georgia Tech website; click **only** the **Upload File** link (shown below)

2021 Georgia Tech Fault and Disturbance Analysis Conference			
OpenConf Peer Review and Submission Management System			
OpenConf Home	Privacy Policy	Email Chair	

Authors:

- [Make Submission](#) ← **Initial Registration Only**
- [Edit Submission](#)
- [Upload File](#) ← **Paper/Presentation/Bio/Author Form Uploading**
- [View File](#)
- [Withdraw Submission](#)
- [Check Status](#)

Review and Program Committees (Not applicable for Authors):

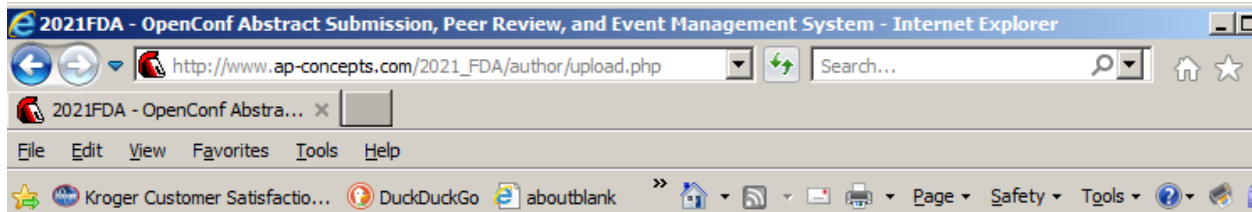
- [Sign In](#)

Sign Up – **Keycode:**

Chair (Not applicable for Authors):

- [Sign In](#)

Next select the appropriate “**Upload Type**” **Note:** Five (5) options are available: Paper, PresentationPDF, PresentationPPT, Author Form or Biography.



2021 Georgia Tech Fault and Disturbance Analysis Conference			
OpenConf Peer Review and Submission Management System			
OpenConf Home	Privacy Policy	Email Chair	

Upload File

Upload Type:

Paper
PresentationPDF
PresentationPPT
Author Form
Biography

←

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AUTHOR'S GUIDELINES FOR FORMAT AND PRESENTATION OF PAPERS

Next, click on the **Browse** button to navigate to the file to be uploaded. Note that the uploaded file format must be as follows:

- Paper → PDF format
- Presentation → PPT, PPTX or PDF format
- Author Form → PDF format
- Biography → PDF format

Enter your original **Submission ID** number and **Password**. (See figure below).

Finally click on the **Upload File** button to complete the operation.

2021 Georgia Tech Fault and Disturbance Analysis Conference

OpenConf Peer Review and Submission Management System

[OpenConf Home](#) [Privacy Policy](#) [Email Chair](#)

Upload File

Upload Type:

Submission ID: ([forgot ID?](#))

Password: ([forgot password?](#))

File: **Format:**

File size limit is 25MB (Notify Your Session Chair/Vice-Chair if unable to upload files)



Both the preliminary and subsequent papers with power point submissions will be reviewed by the assigned Session Chairperson or Vice-Chairperson. You will be notified by your Session Chairperson or Vice-Chair if there are any questions or issues related to your paper and/or power point presentation that require correction, deletion or modification, or if everything submitted is approved.

TIME FOR PAPER

The time allocated for each paper at the Conference is stated in the program. It is expected that the oral presentation of the paper be completed 10 minutes prior to the allocated time. The remaining 10-minute period will be used for questions and/or discussions about the paper presentation and the changing of Speakers.

AUTHOR'S GUIDELINES FOR FORMAT AND PRESENTATION OF PAPERS

CONTENT OF PAPER

The paper should emphasize more of the "why" and/or "how" more than the "what." Tell "why" or "how" a technique or scheme was applied to solve a problem. The paper should contain information of technical significance as opposed to commercial significance. **Vendor product names, promotional material and logos within the presentation must be avoided** as this has prompted numerous complaints from conference participants during previous conferences.

PRESENTATION

It is recommended that your presentation be prepared on a TRUC/GaTech approved Microsoft® PowerPoint® or other approved TRUC/GaTech formatted document such as a PDF.

Total time limit for each presentation is 40 minutes which includes 10-minutes for Q&A. Since the FDA 2021 conference is virtual, time keeping will be conducted differently. Each speaker will be notified at 25 minutes into their presentation that they have five minutes remaining to conclude their presentation. Either the Hopin Moderator, GaTech technician or Session Chair will advise the Speaker that they are at the five-minute window to wrap up their presentation. There will be no audio available for the conference attendees to ask questions. All questions must be submitted via the Hopin CHAT window. Any 'time' overruns with questioners from the audience should be handled by conversing offline between the audience participants/questioners and the Speaker.

Should there be any last-minute changes to your Microsoft® PowerPoint® or other approved TRUC/GaTech formatted document presentation prior to your time to speak on Hopin for the FDA conference, please email the new PDF or Microsoft® PowerPoint® to the GaTech technician so it can be uploaded to the GaTech website for presentation at the proper time.

SLIDES AND VISUAL AIDS

For best time management, the presentation should contain no more than **25 slides**.

There will be no overhead projection equipment available for this virtual conference. Everything will be presented using the shared screens of GaTech computers.

ITEMS TO REMEMBER:

- ✓ Embed true-type fonts in presentation and pdf files.
- ✓ Check videos for clarity and proper color displays if embedded in presentation.
- ✓ No vendor company logos or names within the paper or presentation material except as noted in the following paragraph.

The FDA Conference is a technical forum. Therefore, with the exception of the first cover page of the TRUC/GaTech approved PowerPoint/PDF presentation material that can have one vendor company logo and company name alongside each author, **vendor specific promotional data, vendor product names as well as vendor logos must not be included anywhere else in the Microsoft® PowerPoint® or PDF slides. Utility (non-vendor) users are authorized to include their logos throughout the PowerPoint and PDF presentation slides.**

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The slides should summarize the content of the paper. The TRUC/GaTech template for the first cover page and other slides must be implemented and can be downloaded at:

https://truc.org/wp-content/uploads/FDA_2021-GaTech-First-Page-PPT-1.pptx

It is assumed that a Microsoft® PowerPoint® or PDF file will be used in your slide presentation.

In preparing your slides; A frequent complaint in the past has concerned busy slides with very small printing and too much data. Therefore, talking slides should have a maximum of four or five lines. Graphs should be confined to a single graph per slide, with adequately sized labels for easy audience viewing.

Authors who are using presentation software for slides should avoid contrasting colors that bleed or blur along the edges when observed from a computer's projection/shared display. The default presentation software color schemes provided in the software package usually provide the best color, clarity and contrast.

Detailed plots and oscillograms generally have greater clarity when slides are made from a copy stand photograph of the printed image rather than the CRT image.

TRUC SESSION CHAIRPERSON OR AUTHOR SUBMITS LATE PAPER and MICROSOFT® POWERPOINT® or PDF PRESENTATION TO CONTINUING EDUCATION DEPARTMENT WITHIN THE 4-WEEK DEADLINE PRIOR TO FDA CONFERENCE COMMENCEMENT

Authors not submitting both the paper and power point presentation for review by the aforementioned deadlines and not receiving approval by the Session Chairperson or Vice-Chair may be replaced with an alternate paper.

To ensure that a late submission of a Paper, PowerPoint or PDF will appear in the Proceedings; It will be necessary for the Session Chairperson to have approved your paper (in PDF format) and power point presentation (in PPT, PPTX or PDF format) so that both can be uploaded by the author to http://www.ap-concepts.com/2021_FDA/ or e-mailed along with the presenter's biographical sketch to the Session Chair & Georgia Tech (email to: janine.lyn@ece.gatech.edu) within the four-week timeframe prior to the **26 April 2021** starting date of the FDA Conference. The brief biographical sketch of all authors should be included on the last page of the paper. Session Chair/Vice-Chair person(s) must be copied on all correspondence. The approved late paper submittal can also be mailed to the address below by the author(s) before the FDA conference commences, but emailing is much faster and the preferred method of communication. Mailed copies may not arrive in time for inclusion in the conference proceedings:

Conference on Fault and Disturbance Analysis

ATTN: Ms. Janine A. Lyn

School of ECE
Georgia Institute of Technology
Atlanta, Georgia 30332-0250

Phone: 404-894-2964, Email: janine.lyn@ece.gatech.edu

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Final revisions of the approved Paper and/or Power Point presentations to correct errors or offer clarifications may also be submitted by the author(s) prior to the beginning of the FDA Conference, but **MUST** arrive **PRIOR** to their scheduled presentation time. Since everything for the FDA 2021 conference will be presented on the Hopin platform, the GaTech technician will require notice thereof and reception of the presentation material in the week prior to the commencement of the FDA 2021 conference. Otherwise, there is no guarantee that the latest revision whether it contain corrections or additional information will be made available at the time the Speaker is to make the presentation.

Questions you may have concerning the papers or other aspects of the Conference may also be addressed to Ms. Janine Lyn at 404-894-2964 (janine.lyn@ece.gatech.edu)

VIRTUAL CONFERENCE PROCEEDINGS now without a CD or Notebook paperwork

Starting with the prior FDA 2018 Conference, CD-ROMs containing hard copies of the papers and power point presentations will not be provided by Georgia Tech or the TRUC committee. All material presented during this year's FDA 2021 virtual conference are available from the Georgia Tech website at:

http://www.ap-concepts.com/2021_FDA_PROCEEDINGS/proceedings.html

Enter the following Username and Password to access the website.

Username: FDA

Password: 2021-GT-FDA

Options for downloading the individual Papers, Conference Proceedings, FDA Agenda, FDA Best Paper Ballot and Conference Evaluation Form are easily perceptible from the available selections on the website. As an example, four of the available papers for individual downloading can be seen in the following pictorial. The remaining papers are listed thereafter on the website.



Click to download entire [Conference Proceedings](#)

Click to download [FDA Agenda](#)

Click to download [FDA Best Paper Award Ballot](#)

Click to download [Conference Evaluation Form](#)

Click on paper titles below to download individual papers...

[A Most Unusual Event Analysis](#)

Frank Stacom, Ed McGann

[A National Infrastructure for Artificial Intelligence on the Grid](#)

Theo Laughner, Sean Murphy

[Analysis of a Transformer Differential Relay Over-trip on an External Fault at National Grid](#)

Yujie (Irene) Lu

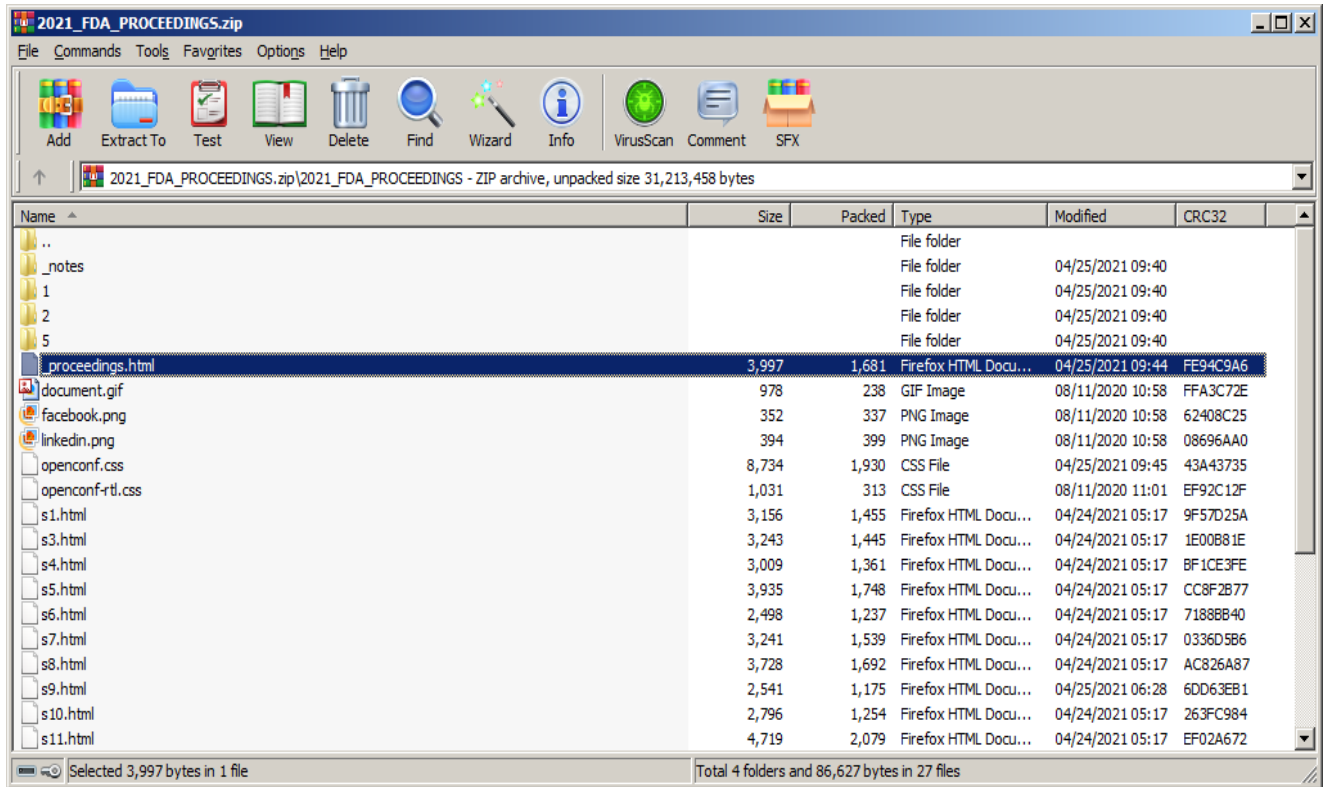
[Analysis of the unexpected operations at a 345kV National Grid substation associated with capacitor bank switching off operation](#)

Song Ji

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To download all of the presentations at once, select the Conference Proceedings option. A zip file named **2021_FDA_PROCEEDINGS.zip** can be opened or saved on a computer. If the **_proceedings.html** file is activated within the zipped file as seen in the following screen shot, the entire file will be unzipped in a web browser listing all of the presentations in sequence.



Otherwise the **2021_FDA_PROCEEDINGS.zip** file can be saved to the “Download” folder of a computer. The user must select the folder titled **2021_FDA_PROCEEDINGS** to access the **_proceedings.html** file that will then produce a listing of all presentations. A partial list seen here.

2021 Georgia Tech Fault and Disturbance Analysis Proceedings

[A Most Unusual Event Analysis](#)

Frank Stacom, Ed McGann

[A National Infrastructure for Artificial Intelligence on the Grid](#)

Theo Laughner, Sean Murphy

[Analysis of a Transformer Differential Relay Over-trip on an External Fault at National Grid](#)

Yujie (Trene) Lu

[Analysis of the unexpected operations at a 345kV National Grid substation associated with capacitor bank switching off operation](#)

Song Ji

[Automatic Assessment of Electrical Load Impact due to Voltage Sags](#)

Daniel Sabin, Jon Bickel

[Benefits of Integrating DFR and PQ data with an asset information model that includes mapping to Planning Models, SCADA Historians, GIS databases, and Asset Management Systems](#)

Stephen Wills, Christoph Lackner, Russell Robertson, Anthony Murphy

[DFR Configuration Control: Solutions for Optimized Performance and Compliance](#)

Phillip Crittenden, Anthony Murphy, Christoph Lackner, Nathan Hooker

[Evaluation of Electrical Degradation in High Voltage Circuit Breaker Monitoring](#)

Nicola Gariboldi, Phillip Corliss

[Event Investigation of 69 kV Double-Circuit Faults](#)

Amanvir Sudan, Ahsan Mirza, Christopher Bolton, Girolamo Rosselli, Sergio Flores

[Experiences with Wind and Solar Plant Modeling and Validation for Bulk Power Systems Interconnection Studies](#)

Sarina Adhikari, David Mueller, Bob Zavadi

[Fault Analysis and the Fourier Transform Explained](#)

Amir Makki, Maria Rotweiler, Robert Orndorff

[Field Experience With Open-Phase Testing at Sites With Inverter-Based Resources](#)

Brett Cockerham, James Gahan, Ariel Valdez, John Town, Ritwik Chowdhury

[Functional Testing of Disturbance Recording Systems in Digital Substations](#)

Alexander Apostolov

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The website location for downloading the FDA 2021 conference papers and computer projected slide presentations may only be available for a short time period on the Georgia Tech website or Hopin platform. Attendees should take the opportunity to download the documents as soon as possible before they are removed from the GaTech website.

The presentations schedule will be emailed by Georgia Tech to all registered attendees prior to the beginning of the conference. Again, please remember that the virtual conference registration ends on April 22, 2021.

Depending upon timing and individual circumstances, either Hopin, GaTech or the Session Chairs will email the appropriate General audience and User Forum 'Ticket' invitations for the FDA 2021 conference to all registered attendees.

HARD COPY PAPER or FACSIMILE FORMATS

Not required or accepted for the FDA 2021 virtual conference.

AUTHOR'S GUIDELINES FOR FORMAT AND PRESENTATION OF PAPERS

SESSION CHAIRPERSON or VICE-CHAIR COMMUNICATIONS

The Chairperson or Vice-Chairperson for the presentation session to which you have been assigned will provide their e-mail contact information for you to use when communicating with them while they review your paper and the Microsoft® Power Point® or PDF presentation.

Copy and paste the following **REGISTRATION** into an e-mail for return to janine.lynn@ece.gatech.edu at the Georgia Tech Continuing Education Department and your Session Chairperson.

REGISTRATION

A discounted registration (50%) will be provided to the presenter of a technical paper (only one discount per technical paper). For this purpose, you should return a completed registration form marked "speaker." In case of a paper with multiple authors, only one registration fee per paper will be discounted, i.e. for the person who is designated as the presenter of the paper.

AUTHOR(S): _____

TITLE OF PAPER: _____

DATE & TIME OF PRESENTATION: _____

AUTHOR MAKING PRESENTATION: _____

SESSION CHAIRPERSON: _____

(check conference program)

=====

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Your Brief Biographical Sketch: To save you time and trouble at the Conference, this information will be passed on to our Session Chairperson. This is in addition to the biographical sketch included at the end of your paper.

PLEASE RETURN BY January 31, 2021

Copy and paste the following **ACKNOWLEDGEMENT** into an e-mail for return to janine.lyn@ece.gatech.edu at the Georgia Tech Continuing Education Department and your Session Chairperson.

ACKNOWLEDGEMENT

PLEASE RETURN AS SOON AS POSSIBLE BUT NO LATER THAN:

January 31, 2021

AUTHOR(S): _____

TITLE OF PAPER: _____

We acknowledge receipt of our paper acceptance and we plan to present the paper at the 2021 Fault and Disturbance Analysis Conference

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Authors Requiring US Visa to attend Conference

If the author needs a letter confirming acceptance of his or her paper for presentation at the Fault and Disturbance Analysis Conference, please contact Dr. A. P. Sakis Meliopoulos via email at sakis.m@gatech.edu. If required, this request should be made soon after the author receives notice of acceptance of the paper for presentation and has confirmed his or her ability to travel to the conference at the GaTech Convention Center in Atlanta, Georgia.

Note: Microsoft® and PowerPoint® are registered trademarks of the Microsoft Corporation

ADDENDUM

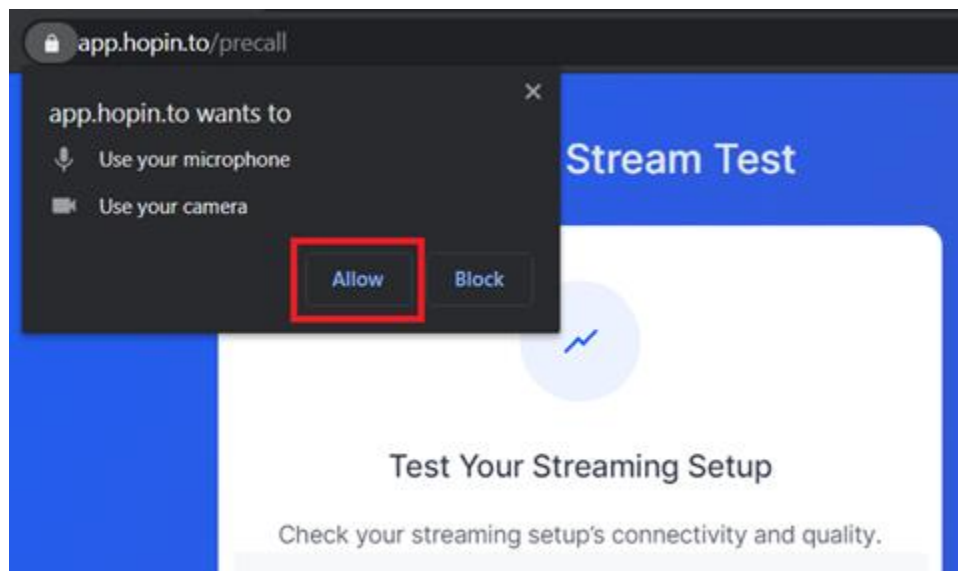
INSTRUCTIONS FOR PARTICIPATING AS A SPEAKER USING THE HOPIN PLATFORM

All **Speakers** must sign in to Hopin to create an account with your username and password using the following link; https://hopin.com/users/sign_in **Note:** When you initially sign up for any Hopin event, you will be asked to create a free account. The account allows you to access the event and fill out your attendee profile. If you already have an account, please sign in using your Hopin credentials when prompted to do so.

1.) The Speaker must test their computer's internet Video and Audio capability:

Test your system's streaming capability with Hopin using this link: <https://app.hopin.to/precall>

- Google Chrome browser is recommended; Mozilla Firefox will also work properly. Other browsers such as Internet Explorer will not work. Test is designed to check your browser's audio and video compatibility.
- Allow access to your microphone and camera. The results will indicate if your computer passes or not.



2.) Network connectivity settings for the Speaker's computer must be verified to make sure that the Speaker's computer can get through all company firewalls to access the online Hopin site:

<https://hopin.zendesk.com/hc/en-gb/articles/360056528911-Network-Connectivity-Settings>

3.) Network Bandwidth Requirements:

- Minimum Recommended Speed - 5mbps download and 2mbps upload.
- Recommended Speed for Best Quality - 30mbps download and 10mbps upload or higher.
- Test your actual Download/Upload speed in Mbps: <https://www.speedtest.net/>
- Notes for corporate machines and networks: If your employer requires that you to use a VPN or device provided by your employer, ensure your device has permission to share your camera and microphone.
- Ensure that you can access the following website domains to use Hopin. Contact your IT department for assistance with your company-managed device or network. For more information about Hopin's network connectivity settings and setting VPN access, [click here](#).
- Some antivirus software can block your device from sharing your camera and microphone on Hopin.

AUTHOR'S GUIDELINES FOR FORMAT AND PRESENTATION OF PAPERS

4.) If the Speaker is not able to get through company firewalls, consider using a personal computer from home or another location to access the Hopin website.

5.) All FDA 2021 PowerPoints should be sent to GaTech prior to the start of the virtual conference for uploading to the GaTech website:

The present plan is to have a GaTech technician controlling the FDA 2021 presentations to minimize any technical difficulties that might occur during the PDF or PowerPoint presentations. The Speaker must prompt the GaTech technician as to when the presently shown slide for the presentation should be advanced to the next slide after you have finished discussing the present slide.

Otherwise if the schedule or circumstances change or permit, the Georgia Tech technician can try to orchestrate the setup allowing a Speaker to share their own screen. However, in any event, it is strongly recommended the Speaker review all of the following links to become familiarized with the requirements of being a Speaker, using the Backstage and understanding how the speakers, attendees, moderators, session chairs and organizers interact with the Hopin event and each other.

6.) Review link to the Hopin User Manual for further interactive information:

<https://hopin.zendesk.com/hc/en-gb/sections/360012210791--Hopin-User-Manual>

7.) Location link on How to Present Slides on the Backstage:

<https://support.hopin.to/en/articles/3499780-how-to-present-slides-on-the-backstage>

8.) Instructions on how to use the Backstage as a Speaker can be found at this link:

<https://hopin.zendesk.com/hc/en-gb/articles/360056078472-How-to-use-the-Backstage-as-a-Speaker>

9.) Instructions and FAQs to understand how other participants interact with Hopin can be found at the following link:

<https://hopin.zendesk.com/hc/en-gb>

10.) Here's a link showing a video that is helpful regarding Hopin usage:

<https://medium.com/@DaveSchools/everything-you-need-to-know-to-get-started-on-hopin-9e0e7ab6b95d>

11.) Hopin Speaker Login information and access:

Session Chair or Vice-Chair will send an email to each Speaker on the day of the FDA 2021 conference that will provide a link to the Backstage for access to create an account and login if you have not already done so, or simply to login if you have already created a Hopin account. All Speakers must enter the Backstage to participate in presenting their PDF or PowerPoint slides.

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12.) Near "End of Presentation" time notice for the Speaker:

To give the speakers a '5-minute warning' the session chair will either post it in the chat for the moderator, or the session chair can 'request audio' and state the '5-minute warning'.

13.) Audience Questions and Comments:

Regarding questions and comments after the paper presentation, the 'audience' will not have audio access. If a member of the audience wants to ask a question or make a comment, they will need to post it into the chat section. The moderator will pass audio control over to the session chair who will then verbalize the question or comment.

14.) Hopin Trial Session for Session Chairs and Speakers Link:

A "Trial Session" is being scheduled with the link to be provided to the Session Chairs and Speakers. Strongly recommended that both session chairs and speakers sign up for and attend the "Trial Session" when the event date & time is announced. Use the following link to sign up and select your availability for the 'Trial' session. <https://forms.gle/KMVm3P4bCuEeDRsT9>

15.) Users Forum Ticketed Attendance:

Vendors and their representatives are excused from participating in this event. All User members in attendance at the FDA 2021 conference will be issued a special 'Ticket' from Hopin for access to the User Forum that will be conducted Monday afternoon on the first day of the FDA 2021 conference.

16.) Display and Discussion of Actual Fault Records Provided by Participants:

This is also a virtual event for the FDA 2021 conference. The same procedures would be required as if being a Speaker for the general conference PowerPoint or PDF presentations. Contact Robert Orndorff at robert.m.orndorff@dominionenergy.com for instructions on how to handle your fault record offering.

17.) Recommended Browsers Chrome and Firefox:

Google Chrome is strongly recommended;

<https://www.google.com/chrome> [nam12.safelinks.protection.outlook.com]

If you cannot use Google Chrome, Firefox is also supported;

<https://www.mozilla.org/en-US/firefox/new> [nam12.safelinks.protection.outlook.com]

- The most up to date version is recommended for the best performance.
- You do not need to download and install application software - Hopin is entirely web-based.