>> Hello, welcome to the FCC's LPTV channel study data webinar. This is Hillary, I am the deputy chair of the task force. And we're very pleased to have so many people participating in this webinar today. We think that is a great sign of interest in our upcoming special displacement window for LPTV and translator station. Just a little background, we recently, I think, folks are probably well aware, put out a public notice on February 9, that announced we're going to be holding the special displacement window for LPTV and translator stations beginning April 10th. And closing may 15th. In addition, we put out a lot of data and information that's going to help stations get ready for that window. And that's available on our web site. And today, we're going to spend some time taking a deep dive into what to expect from that window. And how to utilize the data we put out in advance to try to identify stations that -- channels that stations might like to make applications for, and also to see what is going on in your market. So, we have Mark Columbo primarily responsible for walking us through the material today, and we have posted a FCC.gov web address where you can email us questions while we're talking through the materials. We'll take a short break after the presentation, and then we'll come back and try to answer as many of those questions as we can. I'm going to ask people who are using our call-in line, if they could please put their phones on mute. We've done that here, as well. But, I think we're getting a little bit of interference here and there from some lines. So, if you could take that additional precaution yourself so that we can make sure everybody is getting a clear feed on the audio here today. I will turn it over to Mark Columbo.

>> Good afternoon. Or good morning, depending on your time zone. I am Mark Columbo, I work for the office of engineering and technology. I'm -- many of you probably know me was primary support for TV study. Today I'm going to be here to walk you through this -- the LPTV channel study data. I am joined by Shawn and many others in this room to help take questions at the end. And as Hillary stated, you can see our address at the bottom, feel free to send questions throughout the presentation. And we will address them at the end. Before we begin, this disclaimer here is just to let you know that if I happen to make a mistake while I'm speaking and something that I says contradicts what is in our rules or something adopted by the commission or issued by the media bureau or others, those things take priority over me. If I make a mistake, that is my mistake, not the commission's. So here's the agenda for today's presentation. I want to start with some information and some helpful hints about the special displacement window. Then we're going to have an in-depth description and demonstration of the maps. And then finally, we will -- I'll provide you with tips on how to use TV study in a way that might speed your processing along as you're trying to evaluate what you want to file in this window, if you need to file. And as stated, please submit your questions as you come up with them to our email address for the first part of the presentation, it will appear at the bottom of the screen. So here's some information about the special displacement window. It opens on April 10th. And it closes on May 15th. So that's actually a little bit longer than 30 days that most windows are open. And, of course, it's still more than a month away, so you can start your work at any time. But, you should have your applications in my May 15th. If you wait until after to file, you will -- you, A, may get bumped by someone who did file in the window, or B, you will have to wait until a later filing opportunity. When you file your application, you must demonstrate a reason for displacement as you would with any displacement application. If you've been through this process before with displacement, then you're familiar with it. It's the same process, nothing has really changed on that front. In your application, you should specify whether the application conflicts with the prerepack facilities of any full power class A. If it does, and you want to file to use that after the repack is complete, you will need to request a waiver of our contingent answer rule. And you should spell that out in your application. Part of that is that you will have to accept a condition not to operate before the impacted station or stations relocate. Additionally, digital replacement translators that are displaced or new digital to digital translators can file beginning April 10th. The window closure does not end the opportunity for new digital to digital replacement translators. But those applications are cut off as of May 15th, to be considered as mutually exclusive with other such applications. So, who's eligible to file in this window? Eligible stations must be, quote, unquote, operating. The definition of operating is they must be licensed, or have a licensed cover on file, as of April 13th, 2007, the date we released the public notice announcing the results of the incentive auction. Permittees for new LPTV stations may file only after the freeze lift. And we anticipate that that will be a first come first served opportunity. Stations that wish to modify to prevent displacement were encouraged to file prior to December 20th, 2017 when we froze the minor modifications, and may file only after the freeze lift. Now, you may be asking yourself, why can't I file a modification in the displacement window? The reason for that is that according to our rules, specifically 74.787, displacements bump minor mods. That mean you might go through the time, effort, and expense to prepare an application for a minor modification, file it in the window and then May 16th hits and it's dismissed because you've been bumped by a station that filed for displacement. We want to save you time, effort, and expense. So, you will have the opportunity to file at a later time. Dates for lifting the freeze will be announced in a future public notice. Now, I would like to give you helpful hints that I think would be helpful in filing your application. So, first of all, check your coordinates and your heights. I say this just because I've seen a number of applications where either the heights are obviously incorrect or the coordinates are correct, or the coordinates disagree, and I'll give you examples. I was working with one consulting engineer, who was telling me that T study was bumping up the height of his station by 300 meters. It turned out that when we looked at the terrain map, the height of the ground was 300 meters higher than the height that was on file. So TV study was doing the right thing in automatically increasing it. But consider this, in you're on 100-meter tower, TV study will adjust you to ten meters above ground you've now lost the benefit of the 90 meter -- the extra 90 meters on the tower. So that's why it's important to check your heights. As far as coordinates, I've seen cases where coordinates are definitely wrong, where the station one would assume is supposed to be on top of the mountain, and is instead on the valley on the wrong side of the mountain relative to the city it supposedly covers. In another case that I was looking at for personal interest, five different translators on a mountain peak in Arizona, had five different sets of coordinates, when I looked at it in satellite view, I saw two towers. Google not a definitive resource, but I don't think new towers appeared since last year. Those had been licensed long before that. Some of those are coordinates were wrong. For good measure, I checked and wound up with five additional sets of coordinates. Another tip, please double-check your antenna patterns, and this I've actually seen in some of the displacements that have already been filed. In one case that I saw recently, the rotation was wrong. It was just completely different from what the licensed facility had been. It was different than the TV study analysis attached to the application, tan was not pointed at the community it was intending to serve. In another case, you know, typos, when entering your antenna pattern information, there was one filing recently where the antenna pattern was clearly supposed to be the field .97, the value entered was .097. That made a significant difference. Instead of the nice pattern, what the station had was a pattern with a cutout in it, as someone had taken a pair of scissors and cut it.

>> I know it's helpful for some to get audio through the phone...

>>> Just to clarify, that information, or typos, can lead to underprotecting your station, it can mean that you wind up receiving interference that you really shouldn't be referring. Just because if we don't know what the correct value is, then you won't be protected for it. Which is why I stress, please, we want to protect you properly, please check these things. Some other advice, where possible, please coordinate with your fellow LP TV stations and translators. Some of the statewide groups are doing this. I would encourage others who maybe aren't so used to coordinating to consider trying to coordinate. It saves time and effort. So, to start with, MX cases, if you become mutually exclusive, they add time after the window closes, and more importantly, channel changes are not permitted to resolve MX cases, and unresolved MX cases wind up going to auction. If you pre-negotiate, you can make sure you're filing as optimally as you can, and hopefully saving everybody involved time and expense. As far as digital to digital replacement translators and displaced digital replacement translators, please file as early as possible, although you have until May 15th, early filing allows other LPTVs and translators to work around you, since you do have a displacement priority, and one of the concerns that I would have if you wait until the last day of the window and you are filing displaces other LPTVs, then we may wind up delaying processing while we figure out what -- whether there's something that needs to be done to account for these now displaced stations.

>> If there's someone who is not muted, please mute your line. And, of course, we want to get this done as quickly as possible, just as you do. So, please, if you're filing a DRT, or a TTDRT, file early, if you can. If necessary, file with the FAA as early as possible, if you need to, FAA delays tend to add a pretty decent amount of time. So if you know in advance that you're going to need to file with the FAA, please try and do so early so we can get you granted as quickly as possible. Finally, I would like to just briefly touch on international coordination for stations in the border zones. For Canada, we're still using the same procedure that we've used in the past. If the interfering contour doesn't cross the border, the application doesn't get referred to industry Canada. If it does, then it goes to industry Canada for coordination. For Mexico, we are still negotiating with Mexico. All applications within 275 miles of the border will be referred. I believe there was a rule at one point that said something about a 10 kilowatt limit. That is no longer the case. All answers in the next border zone will go to Mexico. So, now that I've covered some of the information about the window, and tried to give you some tips, here's some information -- we're going to move on to the maps. Let me give you information about them first. First, they are guidance, not gospel. They are designed to give you an overall sense of the landscape. To be consistent with the way we conducted the incentive auction, for example, we ran the entire study with a 2-kilometer by 2-kilometer cell grid. When you file an application with the media bureau you're supposed to use a one by one or .5 by .5...

>> Sorry, about that, folks.

>> Folks, if we have interruptions, we'll drop this audio on the line, I'm terribly sorry for the interruptions.

>> Sorry for that. So, basically, the calculations will -- may not match up exactly with what you would find if you did the evaluation and TV study. Which, brings me to my next point, the maps are not substitute for TV analysis. Stations may or may not be displaced, just because we say on this map, does not necessarily mean you are displaced and similarly just because we say that you're not displaced doesn't mean that you may not be. You know, there are definitely cases where it's clear, if you're causing 25% interference, chances are that that will not change significantly. If we evaluate with a different -- but if it's very close to the edge, you may find that it's possible to continue to exist, or, you know, you may continue to exist and find it's not the case. Additionally, just because you're contour fits on the map, interference does extend beyond contour edges, so a TV study analysis is required, just pointing to the map is not enough. Finally, I will point out that the maps do not offer specific channel recommendations. That's not something we're capable to of doing. Specifically since LPTVs have great flexibility when they file their displacement applications, the ability to move 30 miles and change antenna patterns, and so on. So let me talk about the stations that we included in the maps a little bit. For LPTV stations, the list is mostly consistent across the three data runs. Now, you're probably asking yourself at this point wait a minute, there are only two sets of maps, why are you saying there's three data runs? There are two maps, but we had to do three data runs, because we needed a before case to determine who, you know, just because you receive interference doesn't mean you weren't receiving interference before. We needed a before case to know to do that extra step in the calculations. Although we didn't show you the before case in the data, it was used in the calculation. So some of the things we included, we did include ungranted minor modifications filed before December 20th. We assumed that they were designed to work around the repack facilities. And because we did the data less than a month after the freeze was implemented. Still in the process of working through the applications and granting them. And I believe still working through that process. So we expected many of those to be granted in time for the window. Unbuilt CPs for new LPTV stations were included because existing facilities like that do need protection. So, those are in our maps. And also, in the pending and granted data sets, we included the temporary STAs that have been granted to account for wireless operators who have been turning on early. Not because they get any special protection, because they were filed early, but just sort of to make it possible for you to see, hey, if I file here, I might become MX. You know, that's just sort of trying to be as informative as helpful as possible. We included them anyway. For the full powers in the class As, the international stations were the same across all three runs. It was the same set that was used in the incentive auction, plus a handful of new allotments that were negotiated with Mexico. The pre-auction run for full powers and class As was the incentive auction set. In our two sets of maps that we accomplished. Published in the granted maps, we took all granted construction permits as of the 17th of January, and then for any station that did not have a granted permit we used their baseline record. For the pending and granted map, first we took all pending applications, then for any station that didn't have one, we took the granted construction permits. And for any station still missing something, we took their license. And you'll see that in the data. So, now it's time for the demonstration. So what I'm going to do here is I have already downloaded the files. Because I have the ability -- a second to get my notes -- because I want to be ready for my presentation, I have already downloaded the file. If you have not already done so --

>>> You are approaching the maximum length for a recording, finish your recording after the tone...

>> Because we have the two sets of maps, the granted and the pending and granted, I'm just going to go through the granted, the information I'm giving you is the same for both. Just the underlying data included in them is different. So...

>> You have reached the maximum length for a recording, to send this message send pound or hang up. To play it, 3, to rerecord it, 4, to add to it 5. To discard it, 6.

>> Okay. Folks, we're going to drop the audio line here on the phone. We're going to have to.

>> Sorry about the interruptions, folks, we will get through this. Um, so, like I said, we're going to look at the granted data, because the pending and granted data is -- it's the same -- this is the same information, the same description applies, just the underlying data is different to reflect different station lists. So, the process I'm going to take, I'm going to go through the displacement maps first, with the idea that you determine displacement and determine where you might want to try to move to. That seems like a logical -- the logical path. So, I'm going to go ahead and open the map. When it opens, it automatically maximizes, once it pops up here. There we go. And so, what I'm going to do, I'm going to pick the simpler map first, because it's easier to see. I'm going to so you the LPTV service map. So this map is actually pretty simple. All it is is a map that demonstrates the incoming interference that an LPTV station would be receiving. So, what I'm going to do here is I want to get to a specific station, of course I could scroll through this list. That might take me a while. Up at the top right here, you can see I have a magnifying glass, if I click on that, now I can search. So, if I pick a station, I'll pig KGNG in Las Vegas. We give it a moment. Open fully. Let's do this. There we go. Okay. It's supposed to take you automatically there. I think it does web ex on here. So you can see that this station actually does not have any new interference. The station based on the filing that was on file that we used in our study, it has interference-free service in our area, that's why it's a solid green color. If you hover over, it does say interference-free. At the top left there is a search button where you can search on the map, which is what I was just doing. I want to show you an example of a station that does have interference. Let me do that. And I will search for it. So I'll go to Buffalo, New York, and zoom out a little bit. And so here is a station that is receiving interference as a result of the repack. These are the areas that would remain interference-free, and in red, that would not receive interference. And you can pretty clearly see those. Again, if you're having trouble seeing the colors, then, if you hover over it, it will tell you point type is interference, or point type is interference-free. If I were to choose to look at a station that is out of core, you see that no search results come up over here. And that sort of makes sense if you're above channel 37, then you know that by definition, you are displaced, and there was no need to produce such a map. Okay. So that's this map. That's pretty straightforward, I think. Again, this is strictly incoming interference into the LPTV. Now I want to show you the bigger. This is a nationwide map that shows the stations and the displacement. I would like to sort of walk through it from the start. So each point represents a station, if a point is in red, it is one that we have calculated to be displaced. Either based on the .5% interference into a full power class A, or based on the aggregate interference threshold specified up here. If it's in blue, then that's a point that represents a protected station. The line represents all the different lines that you see here reflect a relationship of interference caused to a protected station. So, just to point out, it is possible for there to be points on the map that have that kind of relationship, but have no line if they're co-located. If they're on the same tower, you will not be able to see that line. So, I wanted to show you, because incoming interference is sort of a judgment call on the station's behalf. Whether or not that incoming interference is acceptable to you, the aggregate interference count is actually in the form of a slider. So you see that as you change it, and you increase the allowable interference, points disappear, you can see them disappearing as I go across. Additionally, you can of course filter this by channel. So once again, I'm hovered over the channel, you can see this helpful little magnifies glass popped up. And if I pick a channel here, channel 26, it pops up here. So, I know that that's a valid channel, I click on it. And now all I have is the data on channel 26. Now, two things of note here. First of all, just, in this case, because we're filtered on a single channel, there are no lines for stations who are displaced because they are protecting a full power or class A on an adjacent channel. Since the adjacent channel is not played it can't be shown. The second, some of the red dots may just be incoming interference. So, you have to inspect those cases. Separately, I would also like to show you up here, I'm going to clear this, you see there's this filter with the X, if I click that, that goes away, and now you're looking at the original map again. Up here we have the ability to actually switch how the map is displayed. So I could choose to show all stations whether displaced or not. And this shows you how many stations we did not calculate to be displaced. You can also choose based on incoming interference only or based on interference to full power and class A only. If that is helpful to you. I would also like to show you that you can get -- that you can actually review this data. So, so far all I've shown you is that there is this sort of true-false things either displaced or not displaced. That is not strictly true, your calculation could be different. If I go to the left side, there is this LASSO tool. If I use the tool to drag around a set of stations, which what I'm going to do here, okay, it's going to offer to let me view the data table, I want to do this, and now, what I have here is I have the set of stations that I hooked and how much each is causing or receiving respectively. In the top, this is received interference. So you can see the aggregate interference percent is the interference being received from all combinations of stations. You know, so you can see here that this station is receiving 94% interference. My guess is that will not be acceptable to this station. And you will see that there are other cases like that. Down here, this is interference caused to full power. You can see in this column here, or in this column, if you prefer facility I.D.s, which station it is, and then in this column, here's the percentage telling you the percentage that we calculated. So, the value here is the interference to the low power. Over here is the interference to the full power, or class A in question. The other thing that I need to show you about this map, or about this data set, a few of the questions that I've gotten have been basically is there a way to get this data out in the form of a spreadsheet. And the answer to that question is maybe. Yes, you can. How simple it is is a matter of which operating system you're on. I'm going to press the escape button and drop out of full screen. Now you see there's this worksheet memo up here. If you click on that and go to export. You can either send the cross tab to excel, or you can export to data. And so, if you export the data on the MAC it outputs on a spreadsheet. On windows it exports it to a Microsoft access database. If you have Microsoft access, you can import it and then dump is back out as a spreadsheet if you want. Otherwise, you may want to work on cross tabs to excel, which I found less convenient to use personally when I was looking at it. And, so, that's basically it for this map. I think I've covered everything that I need to cover on this map. So, now, I can show you the other map. So, we'll give it just a moment here. I will close that. And now I'm going to go to the protected points by channel map. We'll give this just a moment to load. And so this map is designed to help you figure out which channels you might want to plug into TV study to do your evaluation. To determine what you want to file for. So I'm going to click go to map. Going to give it a second. And so, what this map does is channel by channel, you can see that it puts each group -- each classification of station on the map. So, I'm going to start by showing you some of the functions. You have the ability to turn the individual station classes on and off. I'm not going to do that. Here we can filter, but we can search by channel, so you can either use the slider to just run through the list, if that's -- run through the maps if that's what you want to do. Or if you know a particular channel you want to look at, once again, we have the magnifying glass that will let you search. If I go to channel 16, that's a valid selection. I click on it. And then now we're looking at the channel 16 map. So let me give you some pointers about how to read this map. So first of all, in green, you'll see that we have the land mobile, the land mobile waiver and the off-shore radio service. Now, the off-shore radio service is down here. This is an accurate protection zone that you must -- that you have to respect. It's in our rules, 74.709, I believe. The land mobile protections that you see in green, these are actually overprotections. We know that, we use the full service distances to be conservative. But, of course, as spelled out in our rules, TV study may tell you that if your closer, that's okay, the rules allow you to be closer as long as you protect accordingly. And to give you an example. Let me zoom in, there is already a case like this. This station on channel 16, you can tell is cut off. Because part of it is underneath this land mobile protection. But, it meets the rules. So, it is already operating there, as it turns out. So, now I'm going to walk you through the colors. As I mentioned, the green is land mobile waiver, and the off-shore radio service. This dark blue color reflects full power in class A stations. The light blue color reflects LPTV stations that we concluded were not displaced based on the assumptions that we made. So, when we made the assumptions that we made as I stated previously, we assumed the interference to full power class A was .5%. In the other map, it defaulted to 2% incoming interference. We used that threshold here, as well. That's up to you and your judgment whether that's an acceptable number, whether you would accept more. But, we just made that -- we needed a number to color code this map. So we went with 2%. And so, in orange, you'll see that there are stations in orange, those stations we determined did not interfere with full power class A but received interference for than 2%. Separately in red, were stations that either caused interference, of .5% or greater to full power in class A, or both caused that interference, and received interference. They're both lumped together in the red area here. So, the purpose of this map is basically to give you something to look through, to be able to filter out. Here are channels that are definitely unavailable, versus channels that may work for me. So, you may look at this map and you say say, there's an opening here, I should plug that channel in TV study. And that's why, of course, you have the slider where you can just one by one channel through and see. If you know which area you're looking at. It's a pretty quick way to get a sense of which areas that you can -- which channels you can evaluate. That brings me to the end of the maps. If you have any questions about it, please send us some emails. And we will answer them at the end. Because I'm not quite done yet. As I mentioned in the agenda, I want to take a moment to go through TV study just a little bit. And hopefully point out some things that might be helpful to you. So, the first thing I want to point out is that -- is something that I don't normally point out, is that we are planning another TV study release. I'm hoping to get it out very soon. We've discovered an issue whereby certain channel-sharing stations are disappearing from the interference check studies. Therefore, if you are doing a study in an area that has channel sharing, you may want to double-check that the applications for those stations have been included as they should. The new version will correct this issue. So, I'm working very hard to try and get it out as quickly as possible. Separately, I wanted to point out that we have the ability here, you can now update the data from LMS directly in the stair,- software. I have seen studies where people say their database was three months out of date. So, if I open the station data manager, there's this download dropdown, let's me download LMS directly, instead of having to go to the web page, download the data, import it in multiple steps, this is a one-step process. And beginning for those of you who have used it, beginning in the new version that we're working on, it won't lock up all the -- all the TV study anymore. It's going to allow you to continue to work in the background while it's updating the LMS data. That's something that's new. If you have trouble downloading LMS through the software, through TV study, please let me know. I know I've heard complaints from people who have had issues getting at it. If you have those problems, please let me know. So, I want to show you -- under the help menu, there's this preferences option. And I wanted to show you a few things off of here. So first of all, one of the things that may speed your process along, I set my TV study to use half the memory on the computer by default. The default is to use all of the data. If you're doing a really big study, say, you're doing a nationwide study, then it makes sense to use all the data. I have found that for doing individual studies, and individual stations, in the interference check mode that using one half makes sense. The benefit of using one half is that it will allow TV study to run two studies at once. So if you set up several studies to run consecutively, it will run two at a time. Alternately, you could use less and less memory, then it will start running slower, it will start have finishing returns. I use one half, you can experiment, or you can leave it alone. Another option that we've added in that's going to be in the next version is this check box to exclude new LPTV stations. Displacements bump modifications, they also bump ungranted applications for new LPTV stations. So what this check box will do is it will allow you to exclude those records entirely from your study, thus saving computation time. And removing the masking that they may have caused that may not actually be there if they become bumped. So, in the interference check window, I want to show you a few things, too. And window's a little bit bigger than it should be. I'm going to pick a station. I'm going to search for it. Some people, I think, are not aware of the replicate check box on this window. So down here at the bottom left, there's this replicate check box. And if I check it, what it gives me the ability to do, it will take a record, whether it's one that's already in the database, or one that I've custom edited with the duplicate function, and I can replicate it to different channels. If I want to test it on 14, 16, 20 through 25. 30, 32 through 36. I can do that. It will then -- instead of creating one study, it will create all the studies necessary to evaluate those channels for this facility. So if you want to evaluate a station, and sort of the -- for the largest coverage that you can get, 15 kilowatts...if you're VHF you might pick the lowest. Set up an Omni, set it up 15 kilowatts. The map will let you filter out full power here, I'm wasting my time if I let my computer crunch on it for a while. You can pick the channels that you want to study, at the end look at the results and see what you find. Additionally, I want the other thing that I wanted to show you is how to actually set up some of the studies for the filings that you're going to need to do. So, if you're trying to do the waiver of the contingent application rule and file on a channel that's not currently available, what you're going to want to do is uncheck this box. What this box does, it protects records not on baseline channel, which means that it tries to include stations that are currently operating. So, if a station's repacked, it's on its prerepack channel. For the purpose of that application, you don't want that. You want to uncheck the box. Alternatively, if you're trying to demonstrate that, hey, my station can exist right now, I don't need the waiver, you would go to the "more" button here, and you would check the box. Drag this over real quick. You check the box for exclude all post transition CP app and baseline. If I check that, you see that this box has automatically checked because of course you do want to look at records on the baseline channel. But then it excludes everything that is post repack. So you can see sort of on the current landscape what's going on. And then, of course, on a case-by-case basis, you can exclude the new LPTV stations. And with that, I think I've reached the end of my presentation here. So, let me get this back up to full screen for you. So, in summary, the window closes May 15th. But it opens on April 10th. Stations satisfying the operating definition are able to file. Ineligible station haves to wait for the freezes to lift. Be sure to check technical information is accurate when you file, particularly your coordinates, heights, and antenna patterns. Where possible coordinate with your fellow operator before filing. DRTs, and DTTREs should file early, and the maps are not a substitute for a TV study analysis. All right, if you have questions, you haven't already sent to us, please email them to the address on your screen, I'm going to put this on mute, and then in a few minutes we'll come back to answer them. Thank you very much. Okay.

>> Okay. We are back to answer your questions. Thanks very much to all of you who have submitted some questions. And we'll get through as many as we can. We have tried to group questions together so that things that are similar we'll answer only once. So, don't expect it necessarily to be red exactly as you phrased it. I wanted to highlight that this presentation is going to be available on our resource page for the transition after this is over. So you will have the materials to reflect upon. In addition to that, the -- events page where this one will show up. In addition, on the resource page, you can find the February 9th public notice that includes a summary of the data. And have links to the data itself, for those of you who asked questions about the data. It is on our web page, look at that resource page in the February 9th PM will take you where you need to go. So, let's start off with some specific questions. One question we got asks with the large number of displacement applications that we will be receiving, how do we anticipate that stations will be able to get them in during this limited window? Shaun, do you want to address that?

>> Right now we don't have any reason to believe that the current window period will be inadequate. Stations have 35 days to file. But they also have the next 60 days to actually behind-the-scenes start preparing their applications and doing the studies that need to be done. So it's actually more than 90 days to prepare. So, that should be more than enough time for the impacted stations to do what they need to do when they get on file.

>> Thanks, Shaun. We've also been asked if we could explain the meaning of the red lines between stations in the maps again. And, Mark, I think that one's for you.

>> The red lines indicate interference caused to a full power class A by a low power translator.

>> And are the interference calculations in the TV study essentially the same as the Longley rice calculations?

>> They are Longley rice calculations, very similar to the older TV process software. TV study is just the newer iteration of it that we used in the incentive auction, and we have been used for repack.

>> Thanks, Mark. We're also being asked if we -- that some folks who are coordinating few LPTV markets for the window, and whether or not they should submit with their application any consents that they may negotiate ahead of the application window? And if so, how to go about doing that? Hussein, do you have thoughts on that one?

>> Yes. Actually, we do like to see if any consent has been agreed upon, the licensees, that those are filed as an attachment to the application.

>> We're being asked if analog LPTV stakes not displaced can apply for channel change during the window? Shaun? Where do we go on that?

>> I think what they're asking is can they file for a digital companion channel. Captain channel applications are right now are frozen. And they'll remain frozen during the window. After the window is complete, at some point, we will announce the lifting of that freeze, and you'll be able to once again file for digital companion channel.

>> Another one on the analog LPTV stations that are not displaced. What about applying for flash cut?

>> Flash cuts are not frozen, and they can be filed for at any time, including during the window.

>> Okay. During the filing window, will applications be visible as they're filed publicly, Hussein?

>> Yes, they will be. And one of the reasons is because as Mark mentioned, we have already received over 300 displacement application. That those are all visible to everybody, and good to know who has filed what, and maybe you avoid filing an application that is going to be mutually exclusive with one that is already on file.

>> Okay. Is there a template for study parameters for displacement studies?

>> The default, the one interference check plate that's included with TV is that template.

>> Except as Mark mentioned, there are some options that you can take, including the pending application that they don't need kind of protection.

>> That's right. In the wizard area you set up the study, there are check boxes, as I pointed out, may need to be checked or unchecked, accordingly.

>> Okay. This one I think I'll take. It deals with reimbursement, and what the SCC is talking about are respect to reimbursing repacked translator stations. I think folks are aware that currently the TV broadcaster relocation fund that's part of the spectrum map only allows reimbursement for full power and class A stations. We are certainly aware that there's some legislation pending that would create reimbursement for LPTV and translators, and of course if that's enacted, the commission will implement probably through a program to accomplish reimbursement for translators. We're keeping an eye on that together with the industry. Okay.

>> I'll take that one.

>> Okay. Can we use cell size and profile increase -- allowed in TV study for LPTV interference?

>> Yes, you can use the one kilometer or the .5 kilometer and the normal range of one to .1 kilometers for the profile.

>> Okay. We have a rather specific question here. One channel is showing incoming interference, on a pending and granted map, and therefore that map classifies as displaced. The granted map doesn't list as displaced. Can we explain why that might be the case?

>> Sure. The pending and granted map includes the ungranted full power and class A applications. So, it may be that an expansion filed for by a full power has now increased the amount of interference to the point that you are now determined to become placed by the parameters. You'll want to run it, and B to the extent that you refer interference, how much it is and whether or not that's acceptable to you.

>> Here's a simple question. Do we have a simple list of displaced stations?

>> No.

>> Why not?

>> Whether a station is displaced is a bit of a -- it's -- in a certain sense, it's up to the station. If the station is receiving 10% interference, but the station is okay with that level, then you're not displaced. We can't make that judgment call for an individual station.

>> Okay. Thank you. We are being asked about the mutual exclusionivity. When that happens and one party agrees to withdraw, what happens next with potential refiling of an application? Hussein, do you want to address that?

>> If I understand the question correctly, I think the question is if one applicant withdraws application in favor of the other one, at what point they can file for another channel? That would be when we lift the freeze for displacements Stow they can come in and file another application for another channel.

>> Okay. And what about priorities with respect to MX applications, what if a LPTV or a translator is MX with a DRT?

>> Low power TV, and TV translators when it comes to displacement application, they have to send priorities. If it's in regard to a DRT, as we mentioned before, DRT is placed application on also new DDRT application, those are priorities over other displacement applications.

>> And this is why I specified, and why I encouraged the digital replacement translator stations to file early. Because they display of the other LPTV and translator stations. The sooner they get it in, the easier it will be for those LPTV and translator stations to work around the DRTs.

>> Okay. And I think we're almost out of time. So we're just going to finish one last question here before we drop off. Why do all LPTVs that receive more than 2% get listed as displaced in this analysis?

>> Because we needed a number to use. The fact of the matter is that as I stated previously, we can't make the judgment of what is acceptable to an individual LPTV station. That's on you, the fact that you are marked as displaced on this map does not necessarily mean that you have to file a displacement application. It just means that you need to evaluate your situation more closely, and see what steps, if any, you need to take.

>> Okay. And I think with that, we are out of time for today, but, the staff is here to respond to questions, if you have them, as you're working with the data. We look forward to seeing all of you in the special displacement window April 10th, file early. Thanks very much.