

WT Docket Number 13-54
INFORMATION AND DISCOVERY REQUEST FOR ALLIED

1. Provide an organization chart and personnel directory in effect for the Company as a whole and for each of the Company's facilities or divisions involved in any activity relating to any relevant product or any relevant service.
2. The Applicants state that, "[o]n its own, Allied could not build a 4G network that rivals its competitors' in speed and capacity, or deliver these products and services nearly as robustly or as quickly." (Public Interest Statement at i.) Further, the Applicants state that "Allied has struggled to adjust to these changed conditions primarily due to its fragmented footprint and limited spectrum depth. Unlike other regional carriers, Allied operates 10 noncontiguous 'island properties.'" (Kreisher Declaration ¶ 7.)
 - a. Provide all plans, analyses, and reports (including any surveys conducted by the Company or third party) discussing how customers view and value the Company's voice and data network quality, coverage, service plans, pricing, and promotions (including local promotions). Additionally, provide all plans, analyses, and reports discussing levels of, and reasons for, churn.
 - b. Provide all documents discussing:
 - i. actual or potential competition between the Company and any competing provider's mobile wireless services (either individually or in the aggregate);
 - ii. actual or potential competitive responses by your Company to any other provider of mobile wireless services, including but not limited to, new product introductions, pricing, promotions retail locations, service offerings, coverage, and network or technology upgrades; and/or
 - iii. spectrum need, spectrum exhaust, or capacity constraints, including attempts by the Company to purchase or lease spectrum or to pursue other partnership arrangements, including but not limited to, joint ventures or mergers.
3. The Applicants assert that Allied has explored offering 4G service, and that the Company discovered that its bandwidth constraints would limit it to offering low-end 4G service. (Kreisher Declaration ¶ 13.) Provide all documents discussing the Company's plans for introducing 4G service (as well as the particular technologies considered), including any discussing potential limitations.
4. In 2009, Allied represented that it was "committed to investing in the Divestiture Markets to expand and improve the scope of services for existing and new customers." (ATN Response at 10, December 17, 2009, Response to Question III.8.)
 - a. Provide all plans, analyses, and reports discussing Allied's efforts to effectuate this commitment, including upgrade and buildout plans.
 - b. For each relevant market, detail whether and to what extent Allied has expanded coverage or upgraded any part of the network.
 - c. Discuss any additional services or device offerings that Allied has introduced. At this time, what percent of Allied's customers have a 3G capable device?
5. The Applicants emphasize the scattered, rural nature of Allied's footprint, asserting that Allied faces significant obstacles to serving customers on a going forward basis. (*E.g.*, Public Interest Statement at 19.) Explain in detail the competitive decisions (pricing, device equipment availability, service plans,

promotions, coverage, retail locations, etc.) made by Allied at the national, regional, state, or local level, including a full description of any differences in the price of the plans, add-ons, promotions, retail operations, coverage or devices that depend on the geographic location of the subscriber. Provide all documents relied on in preparing this response. Further, explain how these obstacles have increased, if they have, since Allied acquired its licenses in 2010.

6. The Applicants argue that “[b]ecause 78 percent of Allied’s subscribers reside in a county on the edge of Allied’s licensed area, they roam more than other carriers’ customers.” (Public Interest Statement at 11-12.) “Approximately 15 percent of calls placed by Allied’s customers are made off network.” (Public Interest Statement at 22.) Further, the Applicants emphasize that as mobile broadband usage increases, the relatively higher use of data roaming by Allied’s customers will further increase its roaming costs relative to other service providers. (Public Interest Statement at 22.)
 - a. Provide all documents discussing the geographic distribution of subscribers, subscriber calling and mobile data usage activity, and incremental roaming costs of Allied subscribers.
 - b. Provide for each month, expenditures on voice and data services resulting from Allied subscribers roaming off your Company’s network. Additionally, provide for each month, voice and data service revenues generated by other providers’ subscribers who roam on your Company’s network.
 - c. Provide any financial models projecting subscribers, service revenues, and roaming expenses and revenues.
 - d. Describe in detail any increase in roaming expenditures and revenues since Allied acquired its licenses in 2010.
 - e. Provide copies of all current roaming and build-out agreements and any attachments in any relevant area and explain the Proposed Transaction’s effects on these agreements, including whether these agreements may be terminated early as a result of the Proposed Transaction; and
 - f. Explain whether any agreements would affect the proposed network transition in any relevant area.
7. The Applicants contend that “[customer] movement on and off Allied’s network has resulted in degraded customer experiences at the edges of Allied’s service areas due to dropped calls, signal loss, etc., and these problems have led to significant churn.” (Public Interest Statement at 21.) Further, the Applicants state that “network quality at the edge of service areas is poor due to the difficulties of inter-network handoffs, resulting in a degraded customer experience” and that “[c]oncentrated efforts by Allied to mitigate the edge experience issues have yielded minimal success.” (Kreisher Declaration ¶ 8.) Provide all plans, analysis, and reports discussing network quality issues, churn resulting from degraded network quality, and efforts taken by Allied to mitigate these issues.
8. The Applicants state that “Allied suffers inefficiencies created due to distances between its various noncontiguous operating areas and their atypical borders.” In particular, Allied claims that “switching and interconnection infrastructure are inefficient and have unusually high associated expenses [. . .] the company has redundant field network and sales expenses [. . .] and advertising cannot be effectively targeted toward potential customers.” (Public Interest Statement at 21.) Additionally, the Company states that “lack of scale and presence in major markets have also prevented it from securing distribution through major retail chains.” (Kreisher Declaration ¶ 10.) Further, the Company describes the difficulties in obtaining consumer devices. (Kreisher Declaration ¶ 16.) Provide all documents relied on in preparing these statements, as well as all plans, analyses, and reports discussing Allied’s:

- a. expenses resulting from its geographically dispersed markets and efforts made to mitigate these expenses; and
 - b. efforts made to obtain consumer devices and retail distribution.
 - c. Describe whether and, if so, how these inefficiencies have increased since Allied acquired its licenses in 2010.
9. Provide a list, in csv format, as of the date of this Request, for each county within each state of each spectrum license that can be used in the provision of mobile wireless services that the Company holds, has a joint venture or other business arrangement with regard to, leases from another person, has another interest in, manages, has contracted to acquire, or is in negotiations to acquire. For each license, identify the: (a) FIPS Code; (b) county; (c) state; (d) market name; (e) market number (in the case of CMA, MTA, or BTA); (f) spectrum type; (g) spectrum block; (h) amount of spectrum; (i) the wireless technology format deployed or planned (*e.g.*, GSM, EDGE, CDMA, EV-DO, EV-DO Rev. A, UMTS, HSPA, HSPA+, LTE); and (j) whether the Company: (i) holds; (ii) has a joint venture or other business arrangement with regard to; (iii) leases to or from another person; (iv) has an interest in; (v) manages; (vi) has contracted to acquire; (vii) is in negotiations to acquire; or (viii) plans to sell.
 10. Provide, as of the date of this Request, maps by bands of the geographic coverage of each relevant wireless service provided by the Company, distinguishing by technological format (*e.g.*, GSM, EDGE, CDMA, EV-DO, EV-DO Rev. A, UMTS, HSPA, HSPA+, LTE). Provide the maps in a geo-referenced format, such as a shapefile (for ArcMap) or table (for MapInfo), and provide all assumptions, methodology (*e.g.*, propagation, field measurements), calculations (including link budgets), tools (*e.g.*, predictive and field measurements) and data (*e.g.*, terrain, morphology, buildings) used in the production of the maps.
 11. Provide the Company's monthly subscriber data, as specified in Attachment A.
 12. Provide the Company's monthly porting data, as specified in Attachment B.

Attachment A – Subscribers.csv

For each month, beginning April 2010 and extending through December 2012, for the CMA's subject to the Proposed Transaction, please provide the data requested below. Data should be reported by subscriber service designation (as indicated in Column #4 by the *service* variable). Please provide the file electronically in comma separated value (.csv) format. The required format for the entries in each column/field is indicated in the instructions below. Do not include text objects in numeric fields (*e.g.*, do not include "\$" in front of any dollar figures). Code any unknown values as "-99999".

<u>Column</u>	<u>Variable</u>	<u>Format</u>	<u>Short Description</u>	<u>Description</u>
1	cma	Numeric	CMA Code	Provide code for the Cellular Market Area (CMA) of the subscribers
2	month	2 char. string	Month	Provide the billing month in MM format: 01=January, 12=December
3	year	4 char. string	Year	Provide the year of billing month in YYYY format, <i>e.g.</i> , 2010, 2011, 2012
4	service	Text	Service Type	Indicates whether the customer is business or residential and the service type. Possible Entries: Business, Residential Prepaid, Residential Postpaid, Wholesale, Other
5	subs	Numeric	Subscribers	The number of subscribers/lines in the CMA for the relevant service at the beginning of the month
6	arpu	Numeric	Average revenue per user	Provide the average revenue per user for all subscribers for the given month and CMA for the relevant service
7	adds_gross	Numeric	Gross subscriber additions	Provide the gross subscriber additions for the given month and CMA for the relevant service
8	adds_net	Numeric	Net subscriber additions	Provide the net subscriber additions for the given month and CMA for the relevant service
9	ccpu	Numeric	Cash cost per user	Provide the cash cost per user for all subscribers for the given month and CMA for the relevant service
10	churn	Numeric	Churn rate	Provide the churn rate for all subscribers for the given month and CMA for the relevant service

Attachment B – Ports To and Ports From.csv

For each month, beginning April 2010 and extending through December 2012, for the CMAs subject to the Proposed Transaction, please provide the data requested below. Please provide the file electronically in comma separated value (.csv) format. The required format for the entries in each column/field is indicated in the instructions below. Do not include text objects in numeric fields (*e.g.*, do not include "\$" in front of any dollar figures). Code any unknown values as "-99999".

<u>Column</u>	<u>Variable</u>	<u>Format</u>	<u>Short Description</u>	<u>Description</u>
1	Cma	Numeric	CMA Code	Provide code for the Cellular Market Area (CMA) of the subscribers
2	Month	2 char. String	Month	Provide the billing month in MM format: 01=January, 12=December
3	Year	4 char. String	Year	Provide the year of billing month in YYYY format, <i>e.g.</i> , 2010, 2011, 2012
4	ports from	Text	Provider subs port from	Either Allied or the name of the competing service provider whose subscribers port to Allied in a particular month
5	ports to	Text	Provider subs port to	Either Allied or the name of the service provider where Allied subscribers port in a particular month
6	Ports	Numeric	Total ports to provider	The number of subscribers who port from the provider listed in Column 4 to the provider in Column 5 during the given month

Definitions

In this Information and Document Request, the following terms shall have the following meanings (such meanings to be equally applicable to both the singular and plural forms of the terms defined):

1. The terms “Company”, “Allied” or “ATN” mean Allied Wireless Communications Corporation, its domestic and foreign parents, predecessors, divisions, subsidiaries, affiliates, partnerships, and joint ventures, and all directors, officers, employees, agents, and representatives of the foregoing. The terms “parents,” “subsidiary,” “affiliate,” and “joint venture” refer to any person in which there is partial (10 percent or more) or total ownership or control between the company and any other person.
2. The term “AT&T” means AT&T, Inc., its parents, predecessors, divisions, subsidiaries, affiliates, partnerships and joint ventures, and all directors, officers, employees, agents, and representatives of the foregoing. The terms “parent,” “subsidiary,” “affiliate,” and “joint venture” refer to any person in which there is partial (10 percent or more) or total ownership or control between the company and any other person.
3. The terms “and” and “or” have both conjunctive and disjunctive meanings.
4. The word “any” shall be construed to include the word “all,” and the word “all” shall be construed to include the word “any.” The word “each” shall be construed to include the word “every,” and the word “every” shall be construed to include the word “each.” All words used in the singular should be construed to include the plural, and all words used in the plural should be construed to include the singular.
5. The term “Applicants” means AT&T and Allied, collectively.
6. The term “Application” means the applications submitted by AT&T and Allied on February 5, 2013, with the lead file number for the wireless radio services listed as 0005632405.
7. The term “BTA” means Basic Trading Areas.
8. The term “CDMA” means Code Division Multiple Access technology.
9. The term “CMA” means Cellular Market Area.
10. The term “competitor” includes any actual or potential competition from any partnership, corporation (including a business trust), joint stock company, trust, unincorporated association, joint venture, limited liability company, or other entity in any relevant area for any relevant product.
11. The term “discussing” when used to refer to documents means analyzing, constituting, summarizing, reporting on, considering, recommending, setting forth, or describing a subject. Documents that contain reports, studies, forecasts, analyses, plans, proposals, evaluations, recommendations, directives, procedures, policies, or guidelines regarding a subject should be treated as documents that discuss the subject. However, documents that merely mention or refer to a subject without further elaboration should not be treated as documents that discuss that subject.
12. The term “documents” means all computer files and written, recorded, and graphic materials of every kind in the possession, custody, or control of the Company. The term “documents” includes without limitation drafts of documents, copies of documents that are not identical duplicates of the originals, and copies of documents the originals of which are not in the possession, custody, or control of the

Company. The term “documents” includes, without limitation, materials of every kind in the possession, custody, or control of the Company whether created internally or externally. In addition, the term “documents” includes without limitation any amendments, side letters, appendices, or attachments. The term “computer files” includes without limitation information stored in, or accessible through, computer or other information retrieval systems. Thus, the Company should produce documents that exist in machine-readable form, including documents stored in personal computers, portable computers, workstations, minicomputers, mainframes, servers, backup disks and tapes and archive disks and tapes, and other forms of offline storage, whether on or off the Company’s premises. Electronic mail messages should also be provided, even if only available on backup or archive tapes or disks. Computer files shall be printed and produced in hard copy or produced in machine-readable form (provided that Commission staff determine prior to submission that it would be in a format that allows the Commission to use the computer files), together with instruction and all other materials necessary to use or interpret the data. Unless otherwise specified, the term “documents” excludes bills of lading, invoices, purchase orders, customs declarations, and other similar documents of a purely transactional nature and also excludes architectural plans and engineering blueprints. Where more than one identical copy of a requested document exists, the Company shall only submit one representative copy.

13. The term “EDGE” means Enhanced Data rates for GSM Evolution technology.
14. The term “EvDO” or “EvDO Rev. A” means Evolution-Data Optimized or Evolution-Data Optimized Revolution A. technology.
15. The term “GSM” means Global System for Mobile Communications technology.
16. The term “HSPA” or “HSPA+” means High Speed Packet Access or High Speed Packet Access + technology.
17. The term “identify,” when used with reference to a document, means to state the date, author, addressee, type of document (*e.g.*, the types of document, as described above), a brief description of the subject matter, its present or last known location, and its custodian, who must also be identified.
18. The term “including” shall be construed as including, but not limited to, and indicates examples for the Applicants to address. The term should not be construed as to limit the response to only those examples listed.
19. The term “LTE” means Long Term Evolution technology.
20. The term “mobile wireless application,” also referred to as “application software” or “app,” means a computer system that enables one or more function on a mobile wireless device running a mobile operating system (*e.g.*, Android, iOS).
21. The term “mobile wireless telephone number,” means the 10-digit telephone number assigned to an end-user to access mobile wireless services.
22. The term “mobile wireless data services” means any data communications service using radio transmission between mobile or fixed stations and a network providing communication of packet data information, including but not limited to, broadband data, video, remote file access, status reporting, facsimile, and internet/intranet access. Mobile wireless data services include non-interconnected Voice over IP but exclude mobile wireless voice and text services, as defined herein.

23. The term “mobile wireless services” includes mobile wireless voice services, mobile wireless text services, mobile wireless data services, and mobile wireless applications.
24. The term “mobile wireless text services” means any communications service using radio transmission between mobile or fixed stations and a network providing communication of numeric or alphanumeric messages, such as multi-media messaging, short messaging, and short codes. Mobile wireless text services exclude e-mails.
25. The term “mobile wireless voice services” means interconnected voice communications services provided using radio transmission between mobile or fixed stations on a wireless basis to customers, other than fixed wireless services. Mobile wireless voice services include interconnected Voice over IP.
26. The term “MTA” means Major Trading Area.
27. The term “Person” includes the Company, and means any individual, partnership, corporation (including a business trust), joint stock company, trust, unincorporated association, joint venture, limited liability company or other entity, or a government or any political subdivision or agency thereof.
28. The term “plans” means tentative and preliminary proposals, recommendations, or considerations, whether or not finalized or authorized, as well as those that have been adopted.
29. The term “plans, analyses, and reports” means business plans, strategic plans, written policies, budgets, analyses, reports, presentations (including quantitative presentations), and similar documents, including all appendixes and attachments thereto, prepared for, presented to, reviewed by, discussed by, or considered by the Company’s board of directors or the Company’s executive management, or any member thereof. The term “plans, analyses and reports” includes without limitation copies of plans, analyses and reports that are not identical duplicates of the originals, and copies of plans, analyses and reports, the originals of which are not in the possession, custody, or control of the Company, but does not include drafts of plans, analyses and reports, but only the final version or the latest draft if the final version does not exist or is not in the possession, custody, or control of the Company.
30. The term “POPs” means total aggregate population.
31. The term “Proposed Transaction” means the proposed acquisition of Allied by AT&T filed on February 5, 2013, with the lead application file number for the wireless radio services listed as 0005632405.
32. The term “Public Interest Statement” refers to the document filed by the Applicants on 0005632405 entitled “Description of Transaction, Public Interest Showing, and Related Demonstrations.”
33. The term “relevant area” means, and information must be provided separately for, each Cellular Market Area.
34. The term “relevant product” means (and information must be provided separately for, any of the mobile wireless services and using any of the following formats: GSM, EDGE, CDMA, EV-DO, EV-DO Rev. A, UMTS only, HSPA, HSPA+, and LTE):
 - 1) feature mobile devices: wireless handset devices that are cable of supporting voice services as well as text services;
 - 2) smartphones: wireless handset devices other than iPhones, with advanced computing capability and connectivity sufficient to run complete mobile operating system software (*e.g.*, Android, Research in Motion Ltd. Blackberry, Windows phone) to support all mobile wireless services,

including broadband data and video applications as well as voice, photographic cinematic, and audio-visual media player services (including books, periodicals, movies, music, games);

- 3) iPhones: smartphones designed and marketed by Apple Inc.;
- 4) tablet PCs (includes netbook PCs): portable devices (other than iPads) with touch screen and/or a QWERTY keyboard input, and advanced computing capability and connectivity sufficient to run complete operating system software (*e.g.*, Android, Windows) to support broadband data and video applications as well as photographic, cinematic, and audio-visual media player services (including books, periodicals, movies, music, games);
- 5) iPads: tablet PCs designed by Apple Inc.;
- 6) e-readers: portable personal computing devices with a display size of 6" to 10" typically, with advanced computing capability and connectivity sufficient to enable users to shop for, purchase, download, and display text, designed primarily for the purpose of reading books, newspapers, and periodicals;
- 7) "air cards" (also referred to as "laptop cards"): portable wireless modems that enable personal computing devices to connect to a mobile wireless network in order to support and deliver voice, data, and video services;
- 8) mobile hotspots devices: network routing devices that enable portable, Wi-Fi enabled handset and personal computing devices to connect to a mobile wireless network in order to support and deliver voice, data, and video services; and
- 9) other mobile wireless devices not listed above. Describe the other devices included in this category.

35. The term "relevant service" means (and information must be provided separately for, any of the services identified below and using any of the following formats: GSM, EDGE, CDMA, EV-DO, EV-DO Rev. A, UMTS only, HSPA, HSPA+, and LTE):

- 1) mobile wireless voice services;
- 2) mobile wireless text services;
- 3) mobile wireless data services; and
- 4) mobile wireless applications.

36. The term "sales" means net sales in units or dollars, *i.e.*, total sales after deducting discounts, returns, allowances, and excise taxes. "Sales" includes sales of the relevant service or product whether provided or manufactured by the company itself or purchased from sources outside the company and resold by the company in the same form as purchased.

37. The term "subsidiary" as to any Person means any corporation, partnership, joint venture, limited liability company, or other entity of which shares of stock or other ownership interests having ordinary voting power to elect a majority of the board of directors or other managers of such corporation, partnership, joint venture, limited liability company or other entity are at the time owned, or the management of which is otherwise controlled, directly or indirectly, through one or more intermediaries, or both, by such Person.

38. The term "UMTS" means Universal Mobile Telecommunications System technology.

39. "United States" or "U.S." means the United States, its possessions, territories, and outlying areas.

Instructions

1. Unless otherwise specified, all Information and Document Requests cover the period from April 2010 through February 5th, 2013.
2. Corporations and other entities, including affiliated or subsidiary entities, shall be identified by the Central Index Key (“CIK”) assigned by the Securities and Exchange Commission (“SEC”). A unique identifier should be used for each entity that has not been assigned a CIK by the SEC.
3. Submit responses to Information Requests in both paper and electronic form, unless an electronic form is specified (*e.g.*, electronic spreadsheet). Submit responses to Document Requests (including materials containing Highly Confidential or Confidential Information) in electronic form only in a manner that is fully compatible with the Commission’s Summation Enterprise software database, as set forth in the Instructions for Submission of Electronic Documents. The Commission does not require the submission of paper copies of these documents at this time, but reserves the right to require their submission at a later time.
4. Each requested document shall be submitted in its entirety, even if only a portion of that document is responsive to a request made herein. This means that the document shall not be edited, cut, or expunged, and shall include all appendices, tables, or other attachments, and all other documents referred to in the document or attachments. All written materials necessary to understand any document responsive to these requests shall also be submitted. Provide final versions of each document; however, if a final version does not exist, provide one copy of the latest draft of the document.
5. Those documents written in a language other than English must be translated into English; automated or machine translations are not permitted. Submit the foreign language document, with the English translation attached thereto.
6. Unless otherwise specified, provide data and interrogatory responses separately for prepaid, post-paid, wholesale, and all mobile wireless services. The Company should provide a separate response for interrogatory, data, and documents (*i.e.*, please do not submit the Company’s interrogatory and data responses on the same discs).
7. Data provided in response to this Request should include a list of all parameters/assumptions on which the data are based.
8. Unless otherwise agreed to by the Commission, requests for the production of documents (and any particular type of document) require the production of all responsive documents in the possession, custody, or control of the Company.
9. For each document or statement submitted in response to the requests, indicate, by number and subsection, the request to which it is responsive and, for documents, identify the Person(s) from whose files the document was retrieved (*i.e.*, custodian). Group submitted materials according to the request number to which they are responsive and then, within each of those request-number groupings, by the appropriate custodian. If a document is responsive to more than one request, submit the document in response to the first request to which it is responsive, and, in accordance with the Instructions for Submission of Electronic Documents below, indicate in the metadata accompanying the document’s electronic record all subsequent requests to which it also is responsive. If any document is not dated, if known, state the date on which it was prepared. If any document does not identify its author(s) or recipient(s), provide, if known, the name(s) of the author(s) or recipient(s) as metadata in accordance

with Instructions for Submission of Electronic Documents. The Company must identify with reasonable specificity all documents provided in response to these requests. Where more than one identical copy of a requested document exists, the Company may submit only one representative copy, but in all cases all metadata, including without limitation all custodians who possessed identical documents withheld, must be provided in accordance with the provisions of Instructions for Submission of Electronic Documents.

10. If search terms were used to conduct all or any part of a search conducted in response to this Information Request, provide a list of search terms used, along with a glossary of industry and company terminology. In addition, describe the search methodologies and the applications used to execute the search.
11. The specific requests made herein are continuing in nature. The Company is required to produce in the future any and all documents and information that are responsive to the requests made herein but not initially produced at the time, date, and place specified herein. In this regard, the Company must supplement its responses (a) if the Company learns that, in some material respect, the documents and information initially disclosed were incomplete or incorrect or (b) if additional responsive documents or information are acquired by or become known to the Company after the initial production.
12. Any documents that are withheld in whole or in part from production based on a claim of privilege shall be assigned document control numbers (with unique consecutive numbers for each page of each document). For any page of any Document that the Company has designated to be withheld as entirely privileged, the Company shall submit a substitute, placeholder page that lists only the Document ID of the page that was withheld in entirety as privileged and a statement indicating that the page has been withheld in entirety as privileged. For any document withheld as entirely privileged, it is sufficient to supply one substitute, placeholder page for that document, so long as the range of Document IDs for the entire document is listed on the placeholder page and each Document ID for each page of the document is reflected in metadata. The placeholder pages must be OCR'd as any other paper record, as described above. For each document withheld as privileged, whether in entirety or in part, the Company shall code the substitute document submitted as specified in and provide as metadata the information in the attached MetaData Table of Requested Fields.
13. For each Document identified on the Company privilege log:
 - 1) Provide the document control number(s);
 - 2) Identify all authors of the document;
 - 3) Identify all addressees of the document;
 - 4) Identify all recipients of the document or of any copies of the document, to the extent not included among the document's addressees;
 - 5) Provide the date of the document;
 - 6) Provide a description of the subject matter of the document;
 - 7) State the nature or type of the privilege that the Company is asserting for the document (*e.g.*, "attorney-client privilege");
 - 8) Provide the number(s) of the Request to which the document is responsive;
 - 9) Provide the document control number(s) of any attachments to the document, regardless of whether any privilege is being asserted for such attachment(s); and
 - 10) State whether the document has been produced in redacted form, and include the range of Document ID labels for those produced documents.

14. The Company's privilege log shall also conform with all of the following requirements:

- 1) Provide a separate legend identifying each author, addressee, and recipient identified on the Company's privilege log.
- 2) Identify on the privilege log, and denote with an asterisk, all attorneys acting in a legal capacity with respect to the withheld document or communication.
- 3) The description of the subject matter of each document shall describe the nature of the document in a manner that, though not revealing information that is itself privileged, provides sufficiently detailed information to enable the Commission to assess the applicability of the privilege claimed.
- 4) For each document withheld under a claim that it constitutes or contains attorney work product, also state whether the Company asserts that the document was prepared in anticipation of litigation or for trial and, if so, specify the anticipated litigation or trial upon which the assertion is based.
- 5) Produce all nonprivileged portions of any responsive document (including nonprivileged or redactable attachments) for which a claim of privilege is asserted, except where the only nonprivileged information in the document has already been produced. Note where any redactions in the document have been made.
- 6) The privilege log shall be produced in both hardcopy and electronic form, the electronic form of which shall be both searchable and sortable.
- 7) Documents sent solely between counsel, including in-house counsel acting solely in a legal capacity, and documents authored by the Company's outside counsel that were not directly or indirectly furnished to any third party, such as internal law firm memoranda, may be omitted from the privilege log. However, any attachments to such documents must be included on the privilege log (if a privilege is applicable to such materials), unless such attachments are addressed and sent solely to counsel.

Instructions for Submission of Electronic Documents

A. Form of Production

1. Electronic documents shall be produced in Summation Enterprise load files as images and/or native format files with extracted text and related metadata and bibliographic information. A list of metadata fields that must be populated, as relevant, is attached. Specific requirements for different types of documents are discussed below. Please contact Commission staff for further technical specifications, including the image and text file specifications and the load file configuration, and for a sample load file set.
2. Each Summation submission must be on a physical media, either a portable hard drive or DVD-ROM.
3. Each physical media provided must have a label affixed. The label shall state: (a) the name of the party submitting the data, (b) the date of the submission, (c) the volume number of production (see below), and (d) the range of documents contained on the media.
4. Each Summation submission must have a volume number associated with it. On the root of the media, the top-level folder must be named for the volume. This volume number should also be indicated on the physical label of the media. The volume naming scheme should start with a 2 or 3 letter prefix (identifying your company) followed by a 3-digit counter (*e.g.*, ABC001). Load file volumes may not contain more than 25,000 records each (but multiple file volumes may be included on one hard drive).
5. Under the volume folder, the production should be organized in 3 subfolders:
 - a) IMAGES (may contain subfolders, with no more than 5,000 image files per folder) and FULLTEXT (may contain subfolders, with document-level text files). No file may be more than 25 megabytes.
 - b) DOCLINK (documents in native format, including all spreadsheets and presentations)
 - c) LOADFILES (the metadata, EDII, and LST information should be contained in one file, and the custodian append information in a separate file)
6. Each submission shall be accompanied by an spreadsheet (production index), in hard copy and electronic form, detailing what has been produced, by custodian and document identification number, and containing statistical information about each volume.
7. If a password is used, the same password must be used for all submissions. If encryption is used, only Truecrypt software may be used.
8. To minimize any delay in loading your submissions, each submission shall be as large as practical under these specifications, while also maintaining a timely and rolling production.
9. Subsequent submissions shall not include information produced in previous submissions, unless specifically requested by the Commission. However, if an error occurs in loading, the entire load must be resubmitted, maintaining the original volume number(s). For example, if a hard drive contains volumes ABC005 – ABC 009, and there is an error with volume ABC006, ABC006 must be corrected and the entire submission ABC005 – ABC009 must be resubmitted on a new hard drive.

B. Document Types

1. Hard-copy (or paper) documents.

(a) Except as otherwise agreed, hard-copy documents shall be produced as image files with related searchable OCR text and bibliographic information.

(b) Some documents may more appropriately and efficiently be produced in hard-copy form (*e.g.*, maps).

(c) Special care should be taken to properly unitize documents, maintain attachment relationships, and indicate file folder or binder labels, consistent with the Definitions and Instructions.

2. E-mail and Other Electronic Messages.

(a) E-mail and other electronic messages (*e.g.*, instant messages (“IMs”)) shall be produced as image files with related searchable text and metadata and bibliographic information.

(b) Each IM conversation shall be produced as one document.

(c) E-mail metadata shall include the folderpath (“folder” field) information for e-mail file folders into which a custodian’s e-mail messages have been organized. Be sure to preserve and produce this information as specified. Beware of copying e-mails into an electronic repository or forwarding them to a central e-mail box, as such processes may destroy this information. *See also infra* Section C(2) regarding custodian metadata.

(d) Depending on how the Company’s systems represent names in e-mail messages or IMs, the Commission may require a table of names or contact lists.

3. Spreadsheets shall be produced in native format (*e.g.*, .XLS files) with the first page imaged and with related searchable text and metadata and bibliographic information.

4. Presentations.

(a) Presentations shall be produced as images that show the full slide images and speaker notes, with related searchable text and metadata and bibliographic information.

(b) Presentations shall also be produced in native format (*e.g.*, .PPT files).

5. Word processing and other electronic documents not specifically addressed elsewhere in this letter shall be produced as image files with related searchable text and metadata and bibliographic information.

6. Databases.

(a) This letter does not address enterprise databases which may be responsive to the Information and Document Requests and should be the subject of a separate discussion once you have identified them.

(b) Smaller databases (*e.g.*, Microsoft Access) that are responsive should be produced, but not as part of the load-file production. Such databases should be produced separately.

7. Company Intranets and Social Networking Sites.

(a) If the Company's intranet or company social networking content (*e.g.*, Facebook, Twitter) contains responsive information, production of these items should be the subject of a separate discussion.

(b) Depending on the nature of the information, it may be appropriate to provide the Commission direct access to the Company's intranet via a secure Internet connection, but significant technical issues are often involved.

8. Embedded files with no substantive content (*e.g.*, corporate logos, executive "head-shot" photographs, stationery address blocks), which would appear in the production as an otherwise blank and therefore unresponsive "TIFF" image, should not be produced.

C. General Issues

1. Attachments and their parent documents are a "family" of documents. Families of documents (*e.g.*, a cover e-mail with multiple attachments) must all be produced in full. If one member of the family is responsive, the entire family is considered responsive, and individual documents in the family cannot be withheld on grounds of being "non-responsive."

2. The required metadata for each electronic document includes "custodian" information (typically, the name of the human person from whose files the document was gathered) and "filepath" information for directory/server folders into which a custodian's documents have been organized. Ensure that this information is collected when collecting responsive documents. If the Company stores documents in a repository that does not maintain personal custodian or filepath information (*e.g.*, that "journals" e-mails), it shall be required to stipulate to custodian identities for purposes of using documents.

3. In certain circumstances, a custodian may be a shared resource (*e.g.*, shared drive or server, shared filing cabinet). Materials gathered from such repositories, to which multiple people have access, shall be produced as separate custodians. The Company shall provide a brief description of each shared resource that includes a list of the employees who have access to that shared resource. The documents in shared resources should otherwise be produced as described in the rest of this letter. (Personal share or server drives are not shared resources and shall be produced as part of each human custodian's files.)

4. Native Format Files

(a) If any native files will be produced that cannot be viewed using the standard configuration of Microsoft Office 2007, Adobe Acrobat Reader 9, WordPerfect X4, or Internet Explorer 7, you will need to notify the Commission so it can determine whether it has the appropriate software and licenses to view those files. If it does not, it may be necessary for the Company to provide that software.

(b) Any encryption or password protection shall be removed from all native format files produced.

5. Images and Text Files

(a) Images of the produced electronic documents shall conform with any further specifications provided by the Commission.

(b) Searchable OCR and extracted text from the produced electronic documents shall conform with any further specifications provided by the Commission.

(c) Care should be taken to ensure that the text files will properly format and wrap.

(d) If any document cannot be interpreted in image/text format (*e.g.*, color, Microsoft Project), the Commission may request that it be produced natively, or the Company can contact the Commission to discuss producing them natively. As noted above in C(4)(a), the Company may need to provide the appropriate software in order for the Commission to view these documents.

6. Deduplication

(a) The Company shall deduplicate vertically within each custodian's files.

(b) The Commission prefers that the Company also deduplicate horizontally across all custodians' files, but only if:

(i) the deduplication methodology preserves information on BCC recipients of e-mail;

(ii) custodian information from suppressed duplicates can be preserved and produced as a custodian append file; and

(iii) the Company, prior to beginning its production, provides a written description its deduplication methodology, including how custodial and BCC information shall be preserved and produced, to which the Commission agrees.

(c) The Company must produce all members of a family of documents (*see* C(1)) and cannot suppress attachments to other documents. In other words, the integrity of families of documents must be maintained, except as limited by any claim of privilege. For example, and in particular, the deduplication process may not remove attachments to e-mails that are being produced because the attachment is produced elsewhere. Improper deduplication may require the resubmission of a production set.

(d) The Company agrees not to raise any objections to the Commission's use of the produced duplicate in relation to whether it was in the files of the custodians who had the suppressed duplicates in their files or were the sender or recipients of any e-mail.

7. Privilege Designations

(a) Documents redacted pursuant to any claim of privilege shall be designated "Redacted" in the Properties field in the metadata and bibliographic information provided. The Company shall provide appropriately redacted related searchable text, metadata, and bibliographic information for these documents.

(b) Documents withheld pursuant to any claim of privilege that are part of a document family shall include a designation of "Family Member of Priv Doc" in the Properties field in the metadata and bibliographic information provided for all the other documents in its family. A placeholder image with a document identification number should be provided in place of the document.

(c) Both redacted and withheld documents shall appear on the privilege log. Each withheld document from a family shall include the family document identification number range in its entry on the privilege log.

8. Document Identification Numbering

(a) A consistent format for document identification numbering shall be used across the entire production. Document identification numbers should contain no more than three segments – *e.g.*, a company identifier, a middle segment (*e.g.*, custodian identifier), and a sequence of 6-8 digits (the number of digits should be consistent across the entire production).

(b) Document identification numbers should not contain embedded spaces (“ ”), slashes (“/”), backslashes (“\”), or underscores (“_”). Document identification numbers may contain hyphens (“-”).

(c) Native format files should be assigned a document identification number; if images have been produced with a native format file, the beginning document identification number of the images should be the native format file’s document identification number.

9. These instructions do not address or endorse any search method the Company may use to identify responsive electronic documents.

10. In order to ensure the Company’s full technical and procedural compliance with these instructions, the Company shall make its Information Technology personnel and those of its vendors available to Commission staff for consultation and coordination before, during, and after its production of materials responsive to the requests.

D. Sample Submission Required Prior to Full Production

In consultation with Commission staff, the Company shall submit a test submission to ensure proper configuration of data for uploading into the Commission’s Summation Enterprise database server before the Company “ramps up” production. To minimize the likelihood of encountering problems during full production, the sample must be representative of an actual production, including multiple types of documents, documents with attachments (“families”), document families from which an item has been removed pursuant to privilege (and replaced with a document identification -numbered, placeholder image), redacted documents with appropriately related searchable text, and presentation documents with speaker notes.

FIELD LISTING FOR SUMMATION METADATA LOAD FILE			TYPE OF RECORD(S) TO WHICH EACH FIELD APPLIES			
Field Name	Field Description	Field Type	Hard Copy	E-Mail	Spreadsheets and Presentations	Other E-Docs (all Attachments, Calendar Appts, Loose Files)
SUBMISSION#	Production volume number (e.g., ABC001)	Note Text	x	x	x	x
REQUEST#	Request(s) to which the document is responsive	Multi-Entry	x	x	x	x
BEGDOC#	Start Bates (including prefix) -- do not use commas, underscores, ampersands, slashes, spaces, characters not allowed in Windows file names or any character used as a delimiter in the load files as part of this number	Note Text	x	x	x	x
ENDDOC#	End Bates (including prefix) -- do not use commas, underscores, ampersands, slashes, spaces, characters not allowed in Windows file names, or any character used as a delimiter in the load file as part of this number	Note Text	x	x	x	x
EPROPERTIES	Indicate All That Apply : <u>Record Type</u> : Loose File, E-mail, Attachment, Hard Copy, Calendar Appt <u>Privilege Notations</u> : Redacted, Privileged, Family Member of Priv Doc	Multi-Entry	x	x	x	x
PRIV	Privileged (Y/N)	Note Text	x	x	x	x
PO1	Subject to First Protective Order (Y/N)	Note Text	x	x	x	x
PO2	Subject to Second Protective Order (Y/N)	Note Text	x	x	x	x
DATEAPPTSTART	Start date of calendar appointment - YYYYMMDD	Date				x
TIMEAPPTSTART	Start time of calendar appointment - HH:MM am/pm	Time				x
DATEAPPTEND	End date of calendar appointment - YYYYMMDD	Date				x
TIMEAPPTEND	End time of calendar appointment - HH:MM am/pm	Time				x
FILESIZE	File size (numeric value only - do not include unit of measure)	Integer		x	x	x
FILEEXTENSION	File extension of native electronic file	Fixed Length 5 chars		x	x	x
FILEPATH	File path to native file as it existed in original environment	Note Text		x	x	x
HASHMD5	MD5 hash value (used for deduplication or other processing)	Note Text		x	x	x

HASHSHA	SHA1 hash value (used for deduplication or other processing)	Note Text		x	x	x
SEARCHVALUES	List of search terms used to identify record as responsive (if used)	Multi-Entry	x	x	x	x
COMPANIES	Company submitting data	Multi-Entry	x	x	x	x
CUSTODIAN	Custodian(s) / source(s) -- format: Last, First or ABC Dept	Multi-Entry	x	x	x	x
DOCID	Must equal the value appearing in the BEGDOC# field	Note Text	x	x	x	x
NUMPAGES	Page count	Integer	x	x	x	x
PARENTID	Parent record's BEGDOC#, including prefix (populated ONLY in child records)	Note Text	x	x	x	x
ATTACHMENTIDS	Child document list: BEGDOC# of each child (populated ONLY in parent records)	Multi-Entry	x	x	x	x
BATESRANGE	BEGDOC# value of the parent record and ENDDOC# value (including prefix) of the last child record (for example, ABC-001 - ABC-020); populated for all documents in the group - otherwise, remains empty	Note Text	x	x	x	x
FROM	Author of the e-mail or loose electronic file (as formatted on the original)	Note Text		x	x	x
TO	Recipients of the e-mail (as formatted on the original)	Multi-Entry		x		
CC	Names of the individuals who were copied on the e-mail (as formatted on the original)	Multi-Entry		x		
BCC	Names of the individuals who were blind-copied on the e-mail (as formatted on the original)	Multi-Entry		x		
SUBJECT	E-mail or calendar subject, or electronic file's document title	Note Text		x	x	x
DATESENT	Date the e-mail was sent - YYYYMMDD	Date		x		
TIMESENT	Time e-mail was sent -- HH:MM am/pm (e.g., 09:32 am; Timezone indicators cannot be included)	Time		x		
DATERECEIVED	Date e-mail was received - YYYYMMDD	Date		x		
TIMERECEIVED	Time e-mail was received -- HH:MM am/pm	Time		x		
HEADER	The internet header information for e-mail sent through the internet;	Note Text		x		
INTERNETMSGID	Internet message identification number	Note Text		x		
MESSAGEID	Unique system identification number for the e-mail message	Note Text		x		
DATECREATED	Date electronic file was created - YYYYMMDD	Date			x	x

DATESAVED	Date electronic file was last modified - YYYYMMDD	Date			x	x
DOCDATE	Populate with: DATESAVED for electronic files (loose files and e-mail attachments) ; DATESENT for e-mails; or DATEAPPTSTART for calendar appointments - YYYYMMDD	Date	x	x	x	x
ATTACHTITLE	File name of an e-mail, e-mail attachment, or loose electronic document	Note Text		x	x	x
APPLICATION	Application used to create native file (e.g., Excel, Outlook, Word)	Note Text		x	x	x
DOCLINK	Current file path location to the native file (on the delivery medium)	Note Text			x	
FOLDER	E-mail folder path (sample: Inbox\Active); or Hard Copy folder/binder title/label	Note Text	x	x		