Overview of Web-Based ADAMS

1. What Can/Can't I do In Web-based vs Citrix-based ADAMS?

In web-based access, a search can be **stopped** at any time by depressing the browser stop button. A search cannot be stopped in Citrix-based ADAMS Find until the results start to display.

Web-based ADAMS is about a day **behind** the Citrix-based PARS database. The new records have to be indexed by RetrievalWare software and the text loaded into the RetrievalWare data base. This is done in the evening.

The monthly and daily folders found in the Citrix-based ADAMS document manager are not in Web-based ADAMS . Web-based ADAMS is a **search engine** not a document management system.

In Web-based ADAMS, a **report cannot be created** like the Citrix-based version. To create a bibliography from a search results list, block, copy and paste items from the list to notepad or word pad.

In Web-based search the document **properties** or **profile** cannot be displayed like the Citrix-based version. However, the results display can be changed so that certain fields will be displayed in the results list, such as docket number, author or addressee. This is done in the Results Field Options. Some fields (such as contact person if there is one in the ADAMS profile) cannot be determined using the web search.

There are searchable properties in Citrix-based ADAMS that are not available in the Web-based search. For example, in the ADAMS Find Advanced Search a search can be done by the property "**DocType**" to locate unique kinds of files such as saved searches, draft documents, reference documents or packages. This property cannot be searched in the Web-based search for public documents.

A search strategy cannot be **saved** in the Web-based access. Searches can be saved in the Citrix-based ADAMS Advanced Search.

The **online-order module** is only available in Citrix-based ADAMS. Document lists can be copied to an e-mail and sent to the PDR.

The **Legacy Library** is not part of Web-based ADAMS.

2. Comparison of Search Features

Comparison of Search Features Between Citrix-ADAMS Find and RetrievalWare Web Search	
ADAMS Find	**RetrievalWare**
General	**General**
Find Count (except text search)	No Find Count feature
Create Report, various formats	Cut and Paste to Notepad/Wordpad
Can view document properties	Cannot view document properties, but can change results display to show certain properties
Search statements can be saved	Cannot save search statements
Cannot stop search until results begin to appear	Can stop search at any time
Simple Find	**Basic Search**
99,999 maximum documents returned	1000 maximum documents returned
Implied "AND" between fields	Concept Search only (Implied "OR" between search terms)
Individual properties and text must be searched separately	Search Box searches across all property fields and document text
Advanced Find	**Advanced Search**
Individual properties and text must be searched separately	Search Box searches across all property fields and document text
Browse values pick lists for all properties	Pick lists for Author and Addressee Affiliation and Document Type
Can "OR" or "AND" between Properties and between Words/Phrases. Implied "AND" between Properties and text search (Words/Phrases)	Implied "AND" between fields. Search Box can be used to "OR" between fields
Words in Order/Words any Order the Range is **# of characters/spaces**	With Boolean Operators using Within or ADJ the Range is **# of words**
Cannot narrow a search that has been executed. Must reexecute the search with additional properties or words	Can refine results to narrow a search results list in the Refine Search box on the Advanced Search page

3. What is "Filter With"?

Filter With is another way of narrowing a search. Filter with is a feature that can be used in conjunction with a Concept search. In the concept search box, words are automatically 'or'ed and semantically expanded so that synonyms are also searched. A search may include all synonyms for a particular subject, however, each document must also include a particular word and it must be the exact word with no synonyms. The "common word" is entered in the **Filter With** box and RetrievalWare will search for concept words or phrases with synonyms, but only return those that have the exact term in the Filter With box.

Example:

A search is entered for the following terms with all associated synonyms: **cost, financ*, fund***, **expense*.** However, each document returned must contain the word **entombment**, with no synonyms. The terms in the concept box would be expanded for all synonyms and the various endings. If the word "Entombment" is placed in the same search box (in quotes), the concept search would automatically put an "or" between terms.

By placing the word "entombment" in the **Filter With** box, the search will "or" the term with the terms in the search box and yield an exact match.

4. What is Refine Search?

Once a search has been executed, the list of documents can be **refined**(narrowed) by selecting "Refine Current Results". By entering a new term(s) the previous search statement will be deleted.

In Advanced Web Search, all **refine search** statements must be entered from the **Advanced Search** screen. If the current results are refined from the Web Search - ADAMS Results List page, the resulting narrowed search will have a maximum of 1000 hits, regardless of how the search was narrowed (refined).

5. How Does the Search Work with "Stop Words"?

Stop words (a, about, before, does, each, from, more, those, well) are not indexed. Stop words are ignored in searches, even within quotes. In Boolean searches where the argument uses 'within 10', the stop words will not count as part of the word count (10 in this case). When searching for the phrase "loss of coolant accident," the word "of" is ignored.

6. How Do I Search for Numbers and Dates?

Single numbers or dates, numbers or date ranges (using a hyphen), and numbers or dates greater than or less than can be searched by using the characters > or <.

Using less than (<) or greater than (>), actually implies less than or equal to (<=) and greater than or equal to (>=). The search will include documents entered on and after that date (**Date Added: >01/01/2003)** or documents on and before a particular date **(Date Added:<01/01/2003)**.

Numbers and dates can be searched within the body of the text and in any indexed fields. Leading zeros are ignored (**01/01/2000 is the same as 1/1/2000**).

Slashes (/), hyphens (-) and periods (.) are all valid for dates, i.e. 03/01/2000, 3-1-2000 or 3.1.2000. The date format is month/day/year, with the year in four digits. The month and day can be one digit and a leading zero is not required.

7. What is the Format for Docket Numbers?

When searching PARS via Citrix or the Web, docket numbers must be entered in a particular format in the Docket Number Field.

There is a listing of operating reactors with the docket numbers on the public web site at **http://www.nrc.gov/reactors/operating/list-power-reactor-units.html**

The docket number format is eight digits, with a leading zero. Docket 40-8681 would be entered as 04008681. Docket 72-22 would be entered as 07200022. Docket 30-11349 would be entered as 03011349. Docket 50317 would be entered as 05000317.

8. How do I Change the Display?

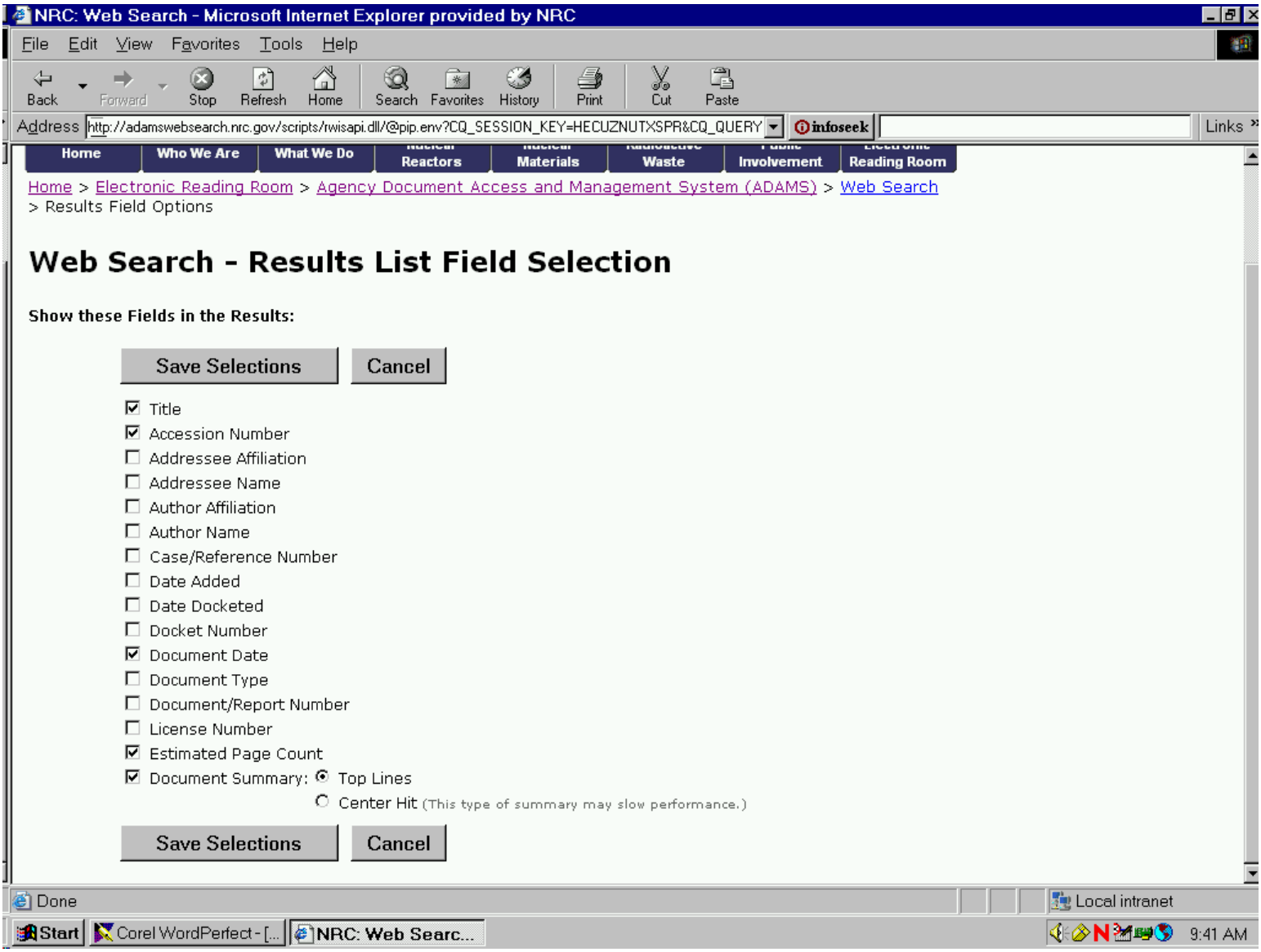
At the bottom of the Advanced Search screen the number of **documents to retrieve** is set at 1000 and the number of documents to view is 20. This can be changed. The number of documents to be retrieved can be set up to 99999.

The default setting for the number of **documents displayed** on a page is can also be changed. The results can also be sorted by any of the properties in the drop down list.

The display can also be changed. The **default setting** is set to display the title, accession number, document date and the estimated page count. This can be changed using the **Results Field Option**. Select the **Results Field Option** at the top of the Advanced Search Page. This can be

set this before typing in a search or after a search has been executed and changed anytime after a search has been executed.

The document **summary** display can also be changed. The system default setting displays the top few lines of the document. For bibliographies, there is an option to have no text displayed by deselecting the document summary. The summary can be changed to display **center hit**. **Center hit** displays a couple of lines within the text with the entered search term(s) so the term(s) can be seen in context. Save the changes and they will remain until they are once again changed or the search session has been completed.



9. Viewing Documents

To quickly **view** a document, open the text file by clicking on the title. To see the image to **print/save/view**, open the **image file**. The system is actually downloading the file to a temporary file on the user workstation when a file is opened to view it, so it may take a few minutes. If the document opens to a blank screen, use the browser refresh button to display the document. If there is difficulty opening the tiff or pdf documents, free plug-ins are available at the following website: http://www.nrc.gov/site-help/plug-ins.html.

There is a **disclaimer** in every text file regarding Official Agency Records. The Official Agency Record is the **image** file not the text. There are two ways to return to the results list. The back button can be depressed, or **Return to Results** can be used.

10. <u>Wildcard (truncated) Searches</u>

A Wildcard search is a query that uses a wildcard character (ie: *, ?, [*search expression*], _, @, \, #, ^) to substitute for unknowns in the search terms or database. Wildcards can be used in Concept or Boolean mode (not Pattern), in full text search or field entries, in multiple words, and even multiple times in one word.

Search time is generally faster because no semantic expansion is performed on wildcard words; however, if wildcards are used too broadly (such as **co***) the search time can be long and the response too large to be useful.

Wildcard Searches			
Wildcard	**Description**	**Example**	**Will Find**
@	Match one alpha character	Anders**@**n	Anderson or Andersen
#	Match one numeric character	NUREG/CR-676#	NUREG/CR-6760 NUREG/CR-6761 NUREG/CR-6763 etc
@ #	Match one numeric and one alpha	NR-0806-**@**-10#-G	NR-0806-S-107-G NR-0806-D-105-G NR-0806-D-102-G
*	Match any character or characters, including nothing	environ*	environ environs environment etc
*	Match any character or characters, including nothing	NR-0806-*-10*-G	NR-0806-S-107-G NR-0806-D-105-G NR-0806-D-102-G
?	Match one character, alpha or numeric	Anders**?**n NUREG/CR-676**?**	same as @ same as #
[ ]	Match each character within brackets	0720102**[**1-9**]**	docket numbers 07201021 thru 07201029
[^]	Match any character except the next character	0720102**[**^6**]**	docket 72 facilities except 07201026

11. Boolean Operators

A search query that uses traditional Boolean operators to find **exact** matches for *all* query words entered. There is no ranking of responses and no automatic expansion. A search is narrowed by using an exact phrase in double quotes or using certain Boolean operators (AND, NOT, WITHIN, ADJ, BETWEEN, and nested statements). A search is broadened by using an "or" operator or wildcard.

The search process is almost instantaneous since no ranking and no automatic expansion are performed; however, it may take longer to sift through a large response since the most relevant documents can appear anywhere on the list

Boolean Operator Searches			
Operator	**Syntax & Description**	**Example**	**Will Find**
( )	(word1 | word2) & word 3 (word1 or word2) and word3 **Use in Search Box queries**	(boric | hydrochloric) & acid (boric or hydrochloric) and acid	Documents with either boric or hydrochloric and acid
not, ^	not word 1 Word 1must not be found in the document ^word 1 **Use in Search Box queries and Title Field Search**	"steam generator" and not tub* ^pharmacy "medical imaging"	Documents with steam generator(s) but not steam generator tubes or tubing. Documents with medical imaging but not pharmacy.

and, &,	word 1 and word 2 Both words must be in the document word 1 & word 2 **Use in Search Box queries or within Fielded Searches**	ferritic and tungsten ferritic & tungsten If no operator is present between the two terms then ***and*** is the default operator.	Documents with ferritic and tungsten in the same document.
but not	word 1 but not word 2 **Use in Search Box queries or within Fielded Searches**	generator but not steam Document Type= "meeting*" but not "meeting notice*"	Any generators other than steam. All meetings (summaries, transcripts, etc) except notices of meetings.
within	word 1 word 2 within N (Word 1 must be found within N words of Word 2. Wi or within spelled out can be used in either of these examples.) word 1 word 2 wi N **Use in Search Box queries and Title Field Searches**	medical and (pharm* and imag* within 10) pharm* and imag* and medical wi 10	Anything with pharm (pharmacy, pharmaceutical, etc)and imag (imaging, image, etc) within 10 words of each other and medical anywhere. All three terms within 10 words of each other in any order.
adj	word 1 word 2 adj N Word 1 must be found within N words of Word 2, and Word1 must come before Word2) **Use in Search Box queries and Title Field Searches**	decommissioning funding status adj 3 loss of coolant adj 2	Decommissioning funding and status documents in that order. Will find loss of coolant documents. The system ignores "of" which is a stop word and looks for loss and coolant.
between	word 1 between word 2 and word 3 **(Word 1 must be between Word 2 and 3.)** **Use in Search Box queries and Title Field Searches**	atlanticare between law and org nuclear between imaging and services	The phrase law@atlanticare.org. Documents about Advanced Medical Imaging & Nuclear Services as an author or recipient and any other document with Imaging Nuclear Services in that order.

or, |	word1 or word 2 word 1 | word 2 (Either Word 1 or Word 2 must be in the document.) **Use in Search Box queries or within Fielded Searches**	**Field Search:** Docket Number: 05000250 or 05000317 Docket Number: 05000250 | 05000317 **Search Box Query:** Docket Number= 05000250 or Docket Number= 05000317 Docket Number= 05000250 | Docket Number= 05000317	All documents on Turkey Point Unit 3 or Calvert Cliffs

12. Sample Advanced Web-based Searches:

Web-based ADAMS has three searches available; Concept Search, Boolean Search and Pattern Search . Concept search can be used in Basic and Advanced Search modes while Boolean and Pattern searches can only be performed in the Advanced Search mode.

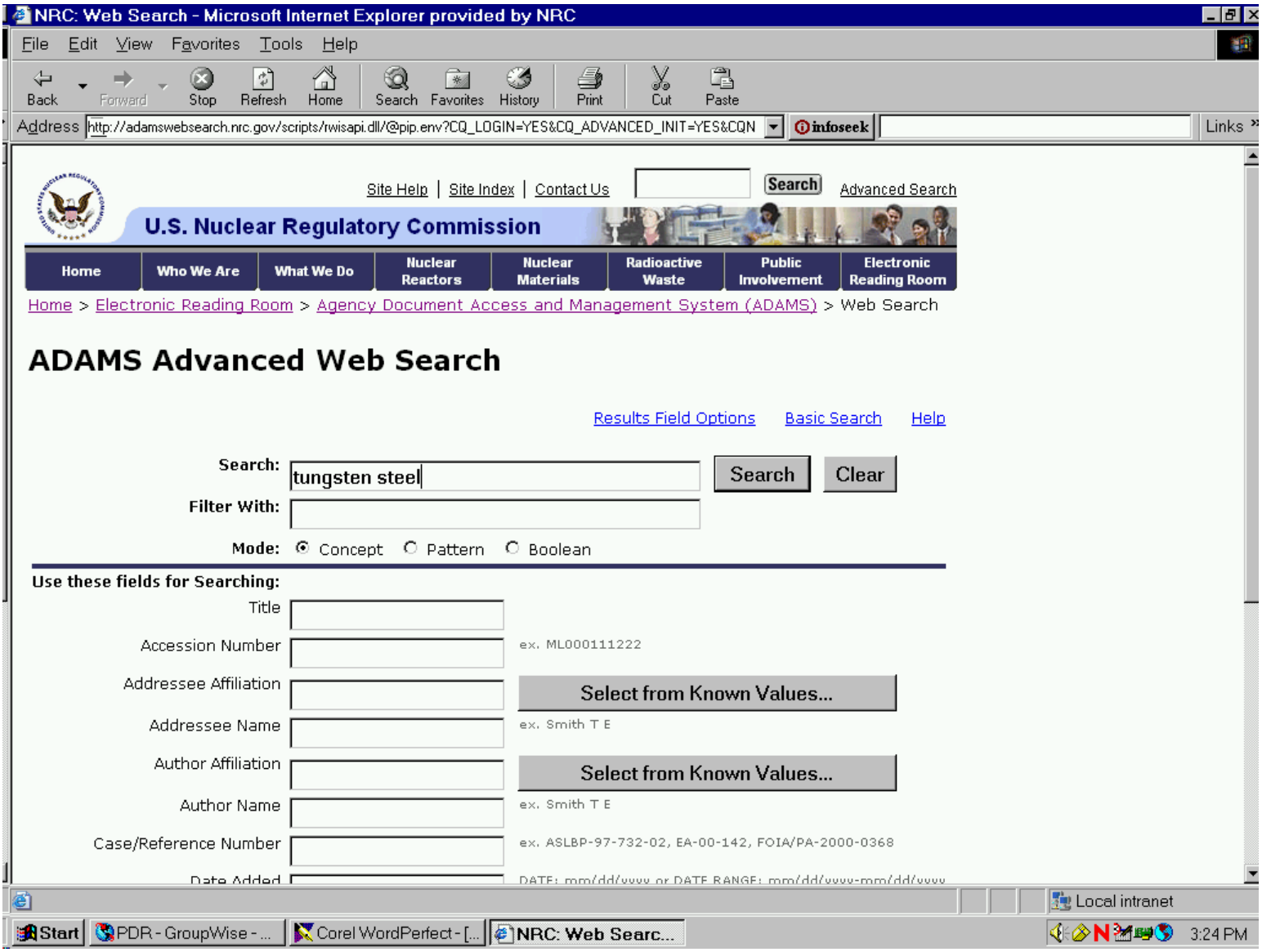
In the **Concept Mode**:

Concept - A query mode in which search terms are expanded to include related terms via a semantic network. **Synonyms** of the search terms are also searched. Each document has a **rank** indicating its probable relevance to the query. In the Concept mode, search terms are automatically "**or**"ed. The search engine automatically puts an "or" between words entered in the search box. The more terms entered in this box, the broader the search will be. **Phrases** must be put in quotes, otherwise the software will see them as separate words and automatically put an "or" between them. Quotation marks (" ") can be placed around a single word. Putting a word or a phrase in quotes turns off the semantic expansion and synonyms will not be searched if the word or phrase is in quotes.

1. Search for documents on tungsten or steel (and synonyms):

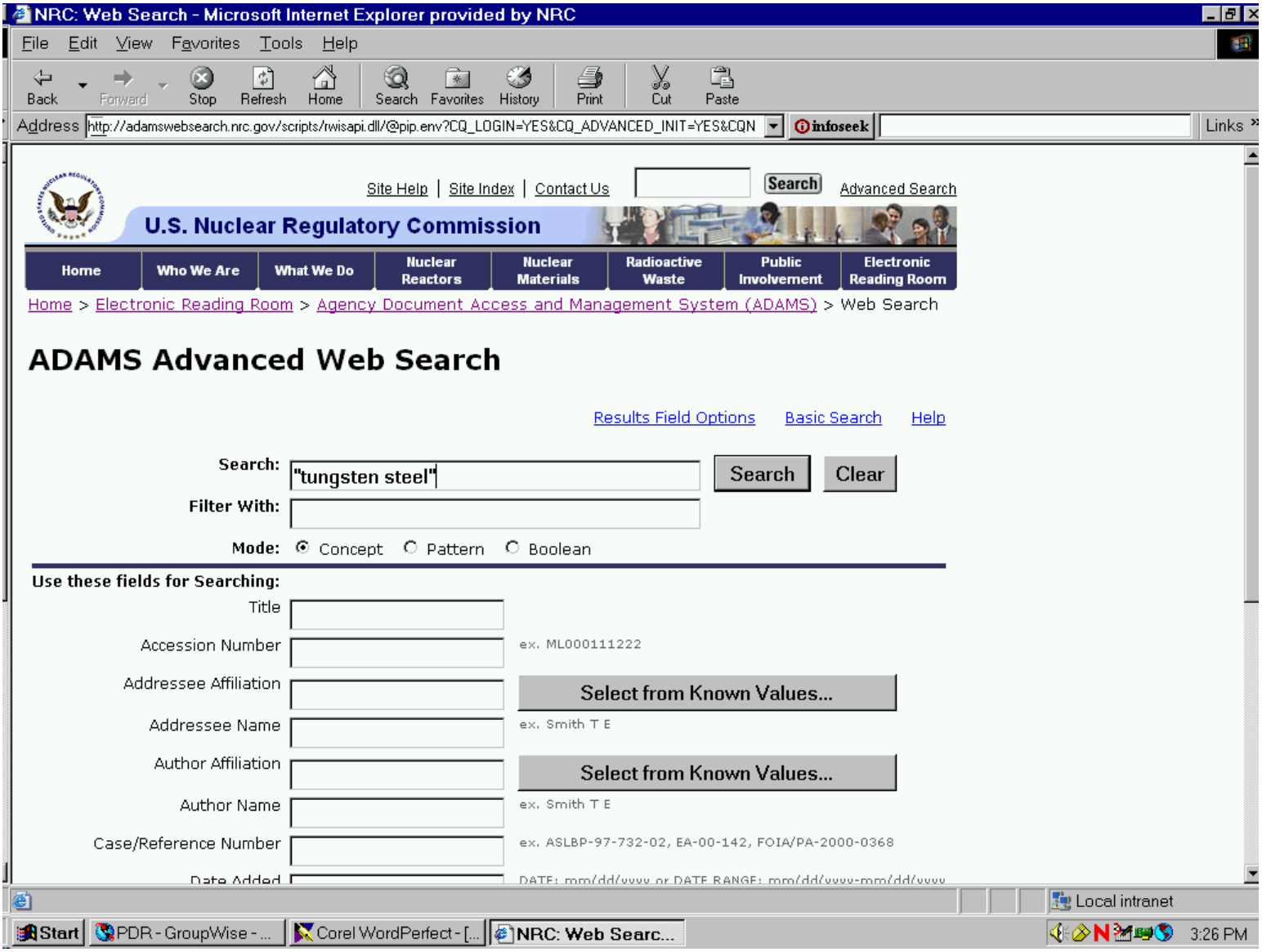
The documents found are ranked for relevancy. In **relevancy ranking**, there are a number of processes that are going on, but basically, relevancy ranking looks for the number of occurrences of the search terms within the documents; the number of synonyms that the documents contain; how close the search terms are to the beginning of the documents; and the number of search terms and synonyms in relation to the total number of words in the document.

2. Search for documents on tungsten and steel in the same document (no synonyms):



Remember, putting a word or a phrase in quotes turns off the semantic expansion and synonyms will not be searched if the word or phrase is in quotes. A search for the phrase **tungsten steel** will return documents with tungsten and steel in the text of the document or in an indexed field, such as the title field.

In the **Boolean Mode**:



Boolean - A query mode in which **exact terms** are matched against the documents in the library. Documents are **not ranked** for relevance. Every document found will match the search criteria 100%. Boolean **operators** (AND, OR, NOT, WITHIN, ADJ) can be used. In the Boolean mode, search terms are automatically "**and**"ed. The more terms entered in the search box in a Boolean search, the narrower the search will be. **Phrases** need to be put in quotes, otherwise the words will appear in all documents retrieved, but not necessarily near each other. Boolean searches can be done only in the Advanced Search.

Between fields there is an automatic "and." **Within a field** there are more options. Values can be "or" values or "and" values. For example, a search can be done for one docket number or another docket number, one document type or another document type, by typing one value and the word "or" and then the second value (**Docket Number: 05000317 or 05000458**).

Values can also be an "**and**" value **within** a particular field. A search for a document related to two specific facilities, would be entered as one docket number, space bar, followed by the second docket number (**05000317 05000458**) . RetrievalWare will automatically put an "and" between the docket numbers. The word "and" or the ampersand symbol (&) can also be used (**05000317 & 05000458**). If there is no operator between values in a field, RetrievalWare will place an "and" there.

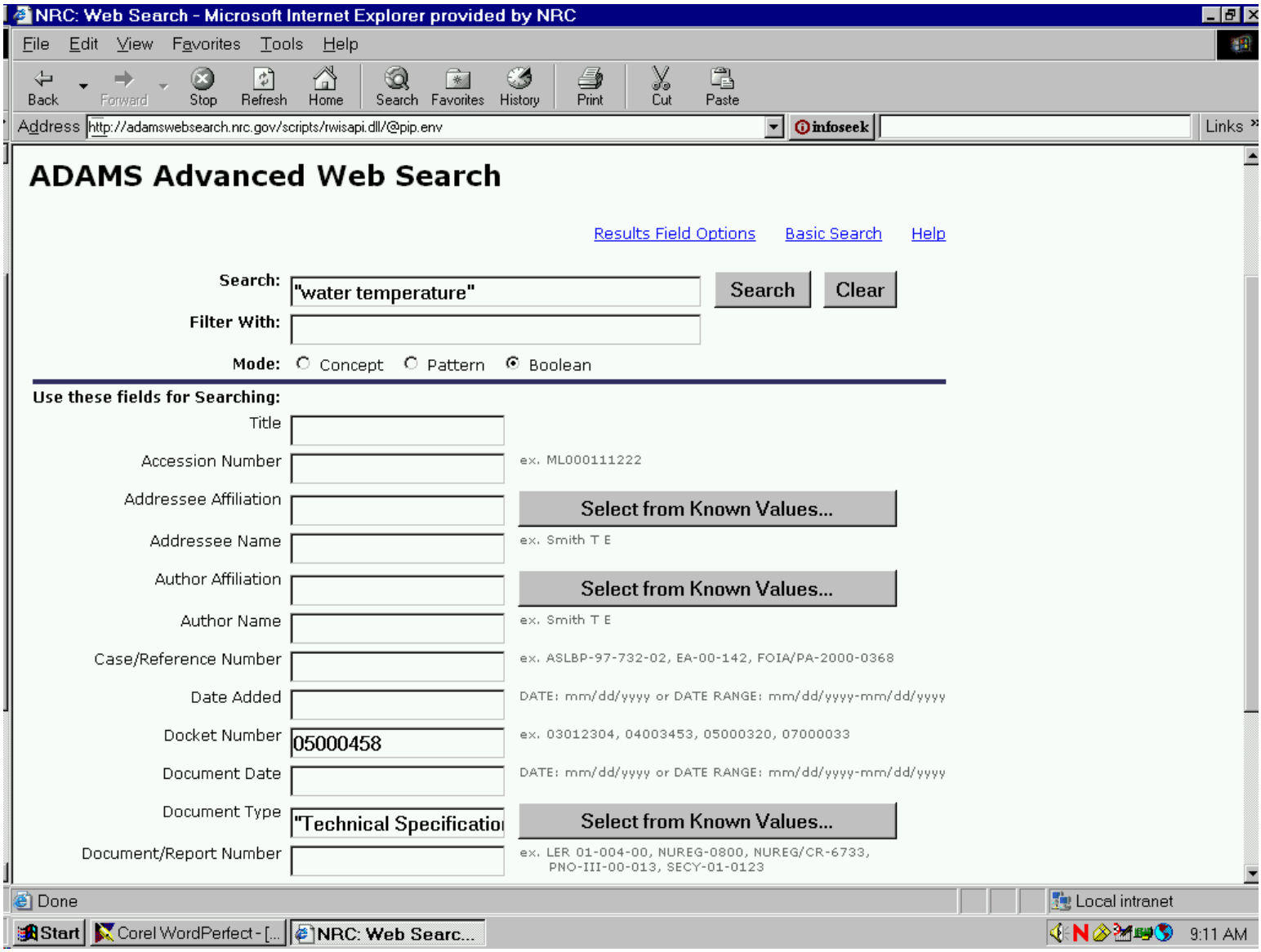
The Author and Addressee Affiliations and the Document Type have drop down tables of values. For these tables, click on the **Select from Known Values.** Move through the table by clicking within the window and typing one letter of the alphabet. The list can also be **scrolled** up or down the table using the arrows on the right side of the window or the arrows on the keypad on the keyboard.

To select a value, click on the value and then on Select Values. The selection is automatically placed in the appropriate field.

A value can also be **entered** and truncated with an asterisk. For example, if a document type is selected from the table, it is entered into the Document Type box with **quotes** around it. If a value is selected from one of the drop down tables, it will be placed in the field with quotes. When a value is typed in the Document Type field or the Author or Addressee Affiliations fields, remember to place it in quotes.

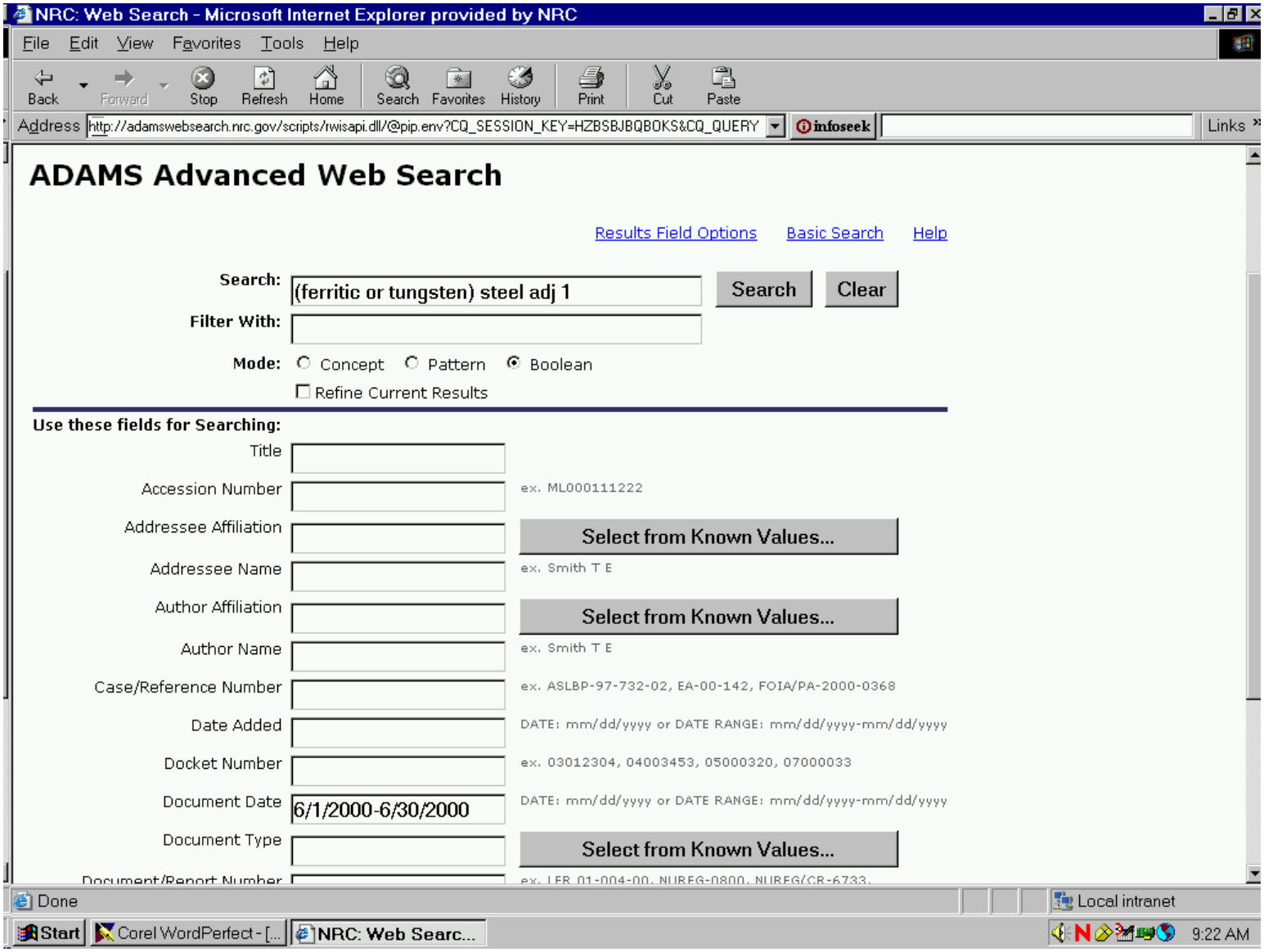
In the Advanced Search, there is an automatic "**and**" between these fields. The more fields that are filled, the **narrower** the search becomes.

1. Search for technical specifications on water temperature in the River Bend docket.



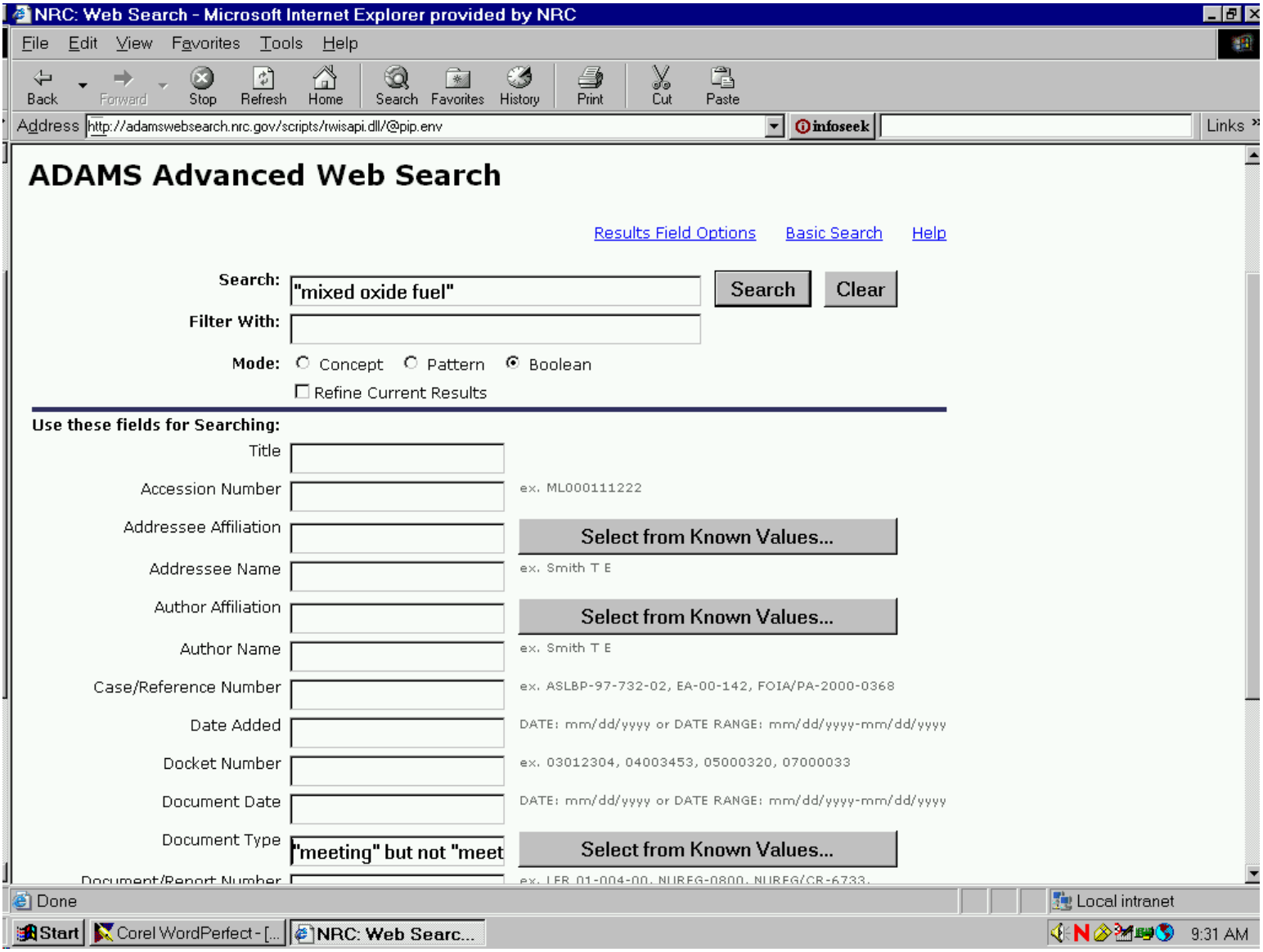
2. Search for ferritic or tungsten steel in the date range of June 1, 2000 to June 31, 2000.

In the Boolean mode more complex **nested searches** can be performed. Because of the ADJ 1 operator, this search will look for the word 'ferritic' or the word 'tungsten' next to and right before the word 'steel'. This search could also be entered as "ferritic steel" or "tungsten steel".



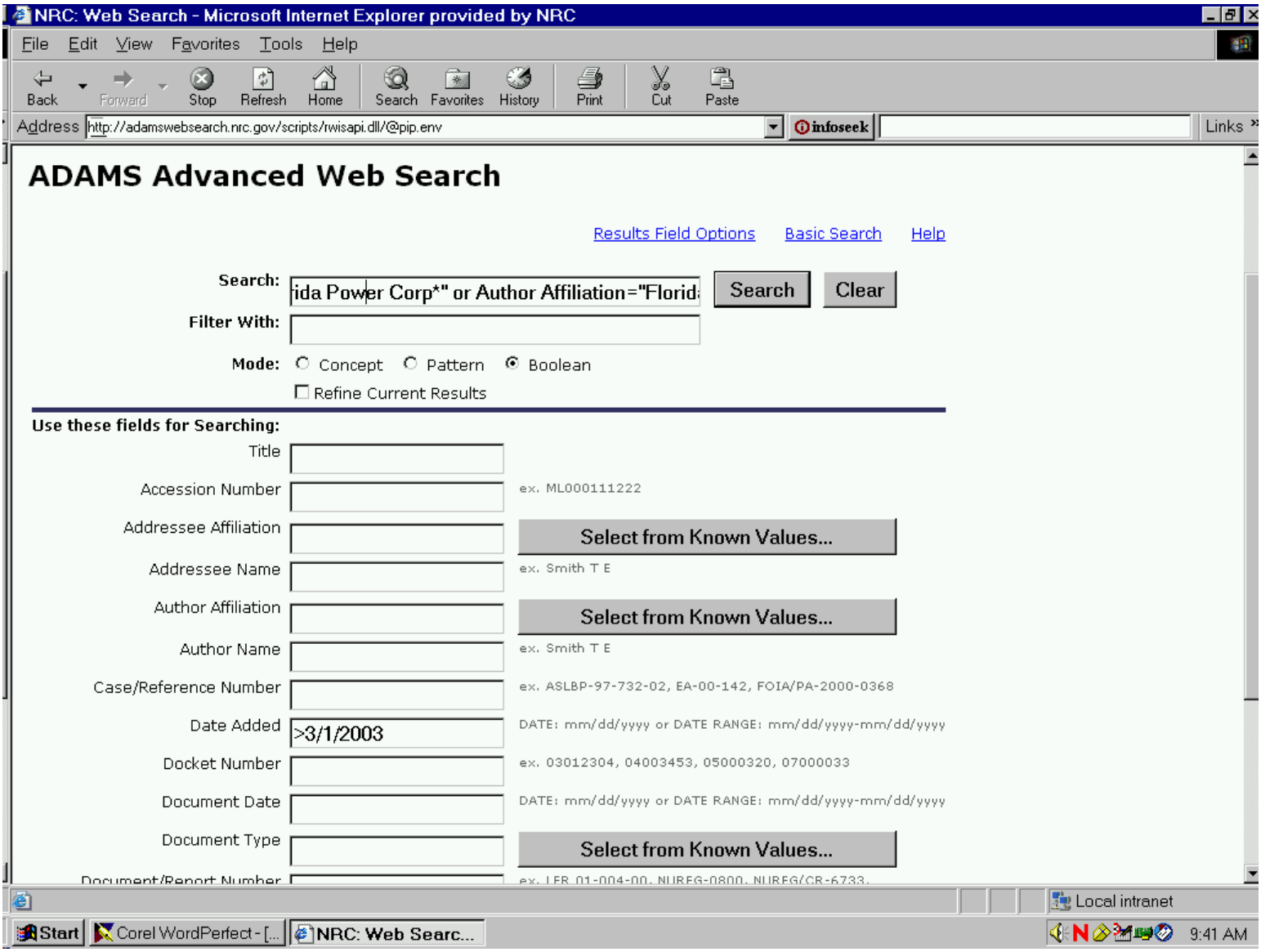
3. Find meetings on mixed oxide fuel but not the meeting notices.

"Not" can be used to **"not out"** a value in a field. For example, if the search results should show all meeting summaries, transcripts, and briefing packages on mixed oxide fuel, but not meeting notices, in the Document Type field enter **"meeting"** (with quotes) **but not** (**can also use and not**) **"meeting notice"** (in quotes).



4. Find all correspondence between Florida Power Corporation and the NRC added on or after March 1, 2003. Remember to put quotation marks around the licensee name. Words can be truncated with an asterisk (*).

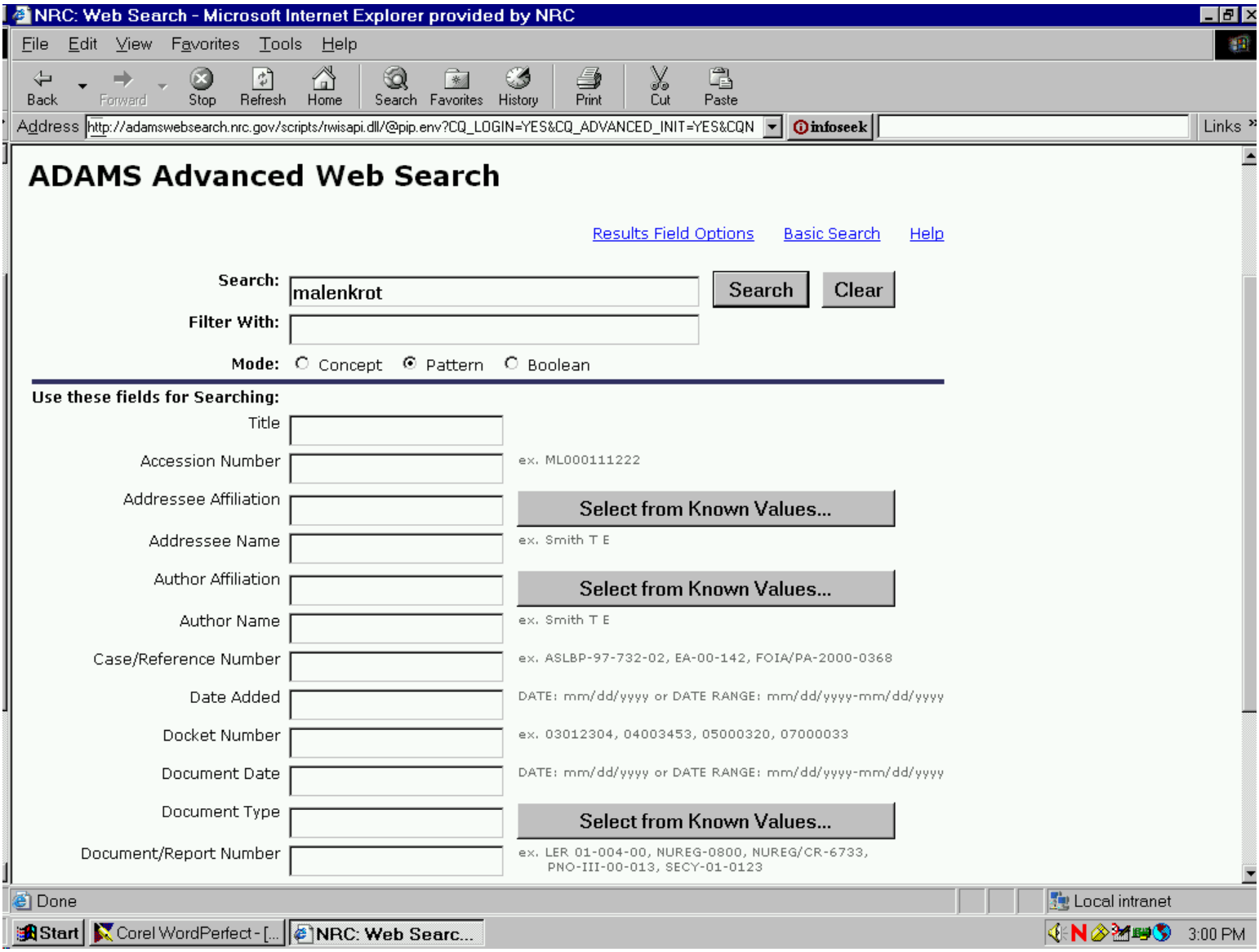
For a search for correspondence between NRC and a licensee, the fields for author affiliation or addressee affiliation cannot be used. There is an automatic "and" between the fields. However, there is a way to search with "**or**" **between** these fields. Use the search box to do this search. By typing (or copy and pasting) in the field names and the values in the Search Box, a search can be performed to see all correspondence between the NRC and the licensee (**Addressee Affiliation= "Florida Power Corp*" or Author Affiliation= "Florida Power Corp*"**).



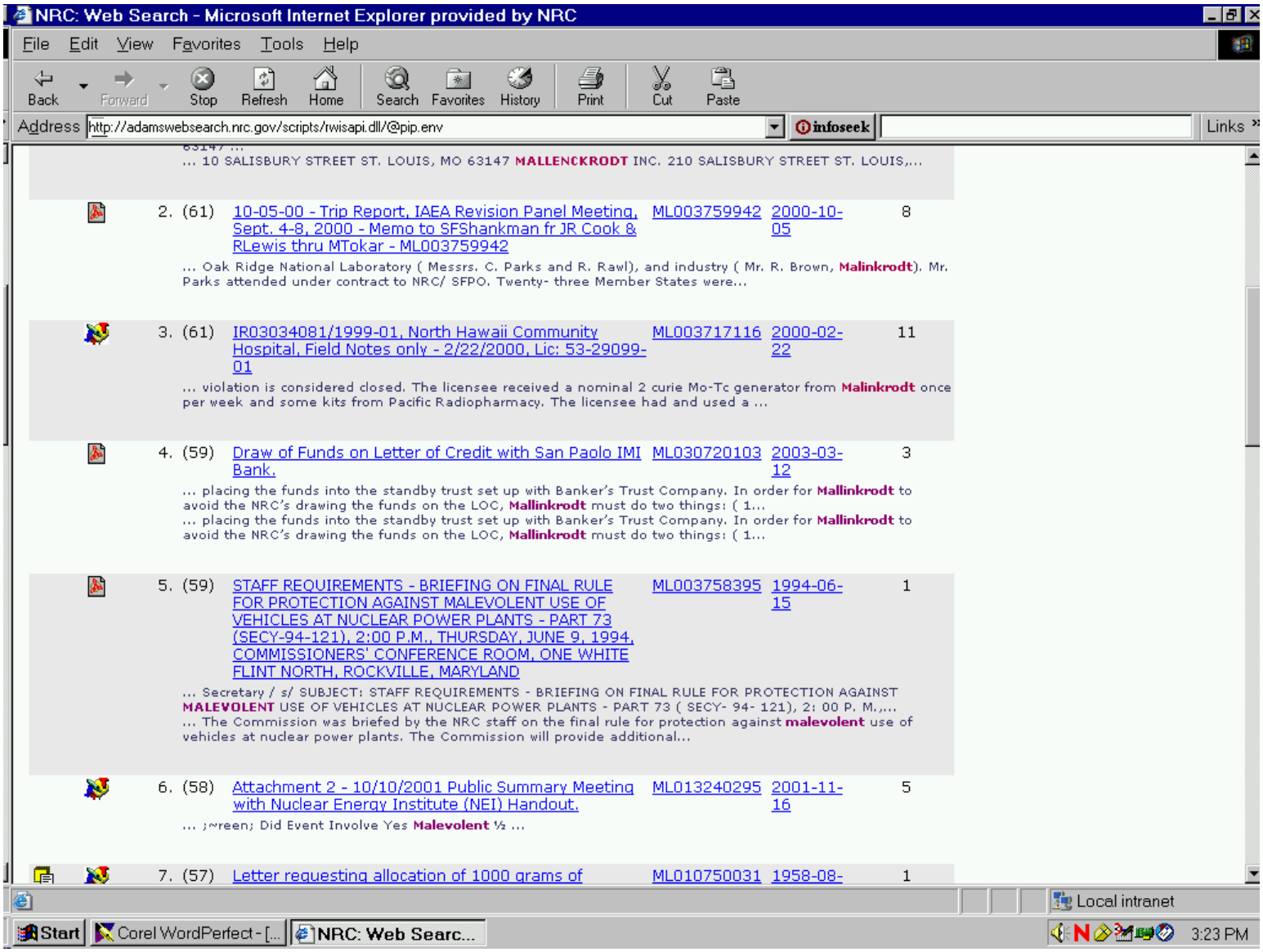
In the **Pattern Mode**:

The third type of search is the **Pattern Search.** This is a query mode in which search terms are expanded to words that are spelled similarly. Results are ranked for relevancy. Pattern search is useful for variant spelling of a word or for OCR'd text. Since the search looks for patterns of letters, these searches take longer than the Concept or Boolean searches.

1. Find documents with the word Mallinckrodt**.** If there may be a variation in the correct spelling of a word, enter a best guess.



The search will return variant spellings of the search term and additional words like malevolent, malfeasance, and so forth.



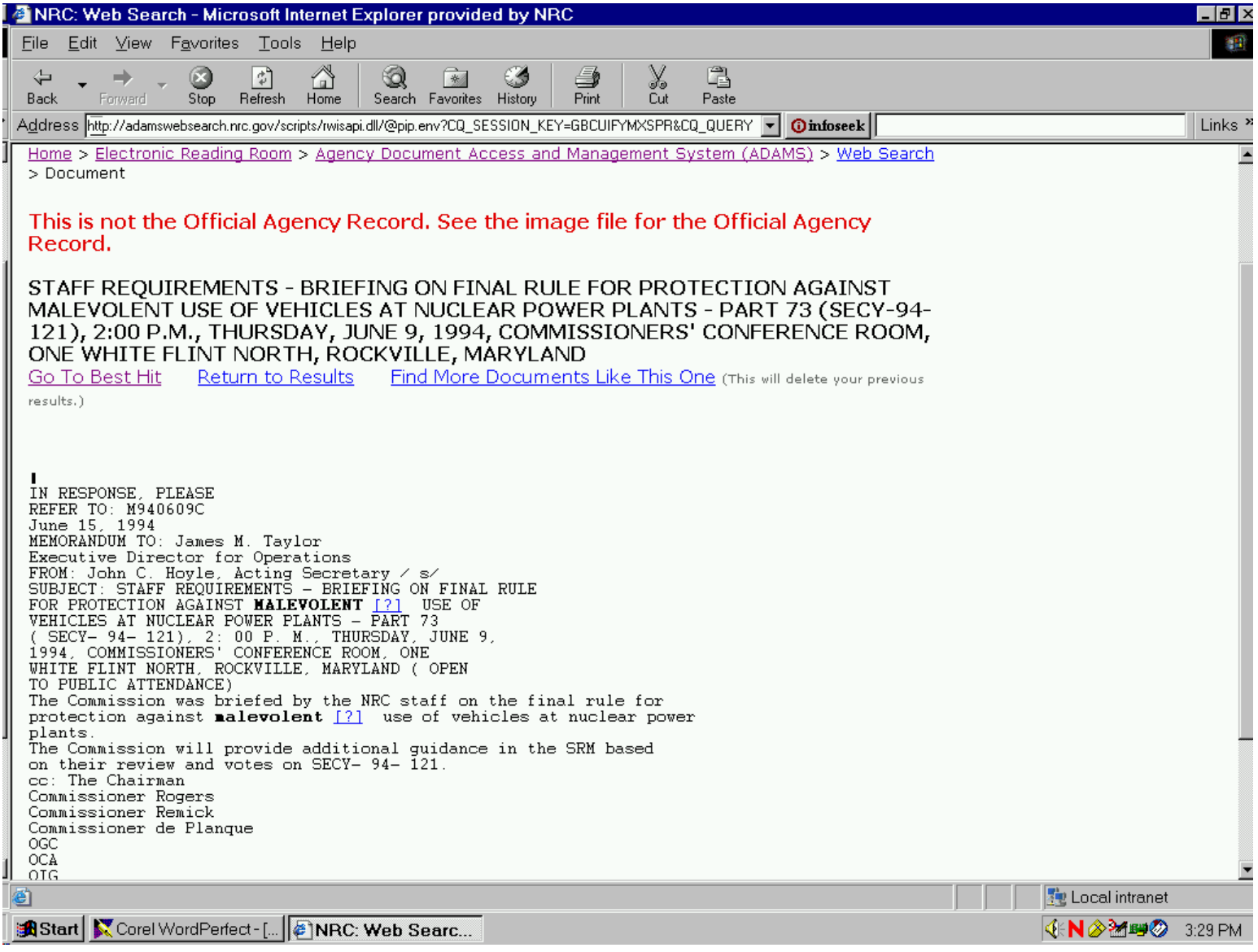
Pattern searches are slower and return a lot of irrelevant documents because of the letter patterns that are found. However, for searching the dirty OCR text or a word that has various spellings, pattern search is beneficial.

13.**RetrievalWare Features in the Text of the Document**:

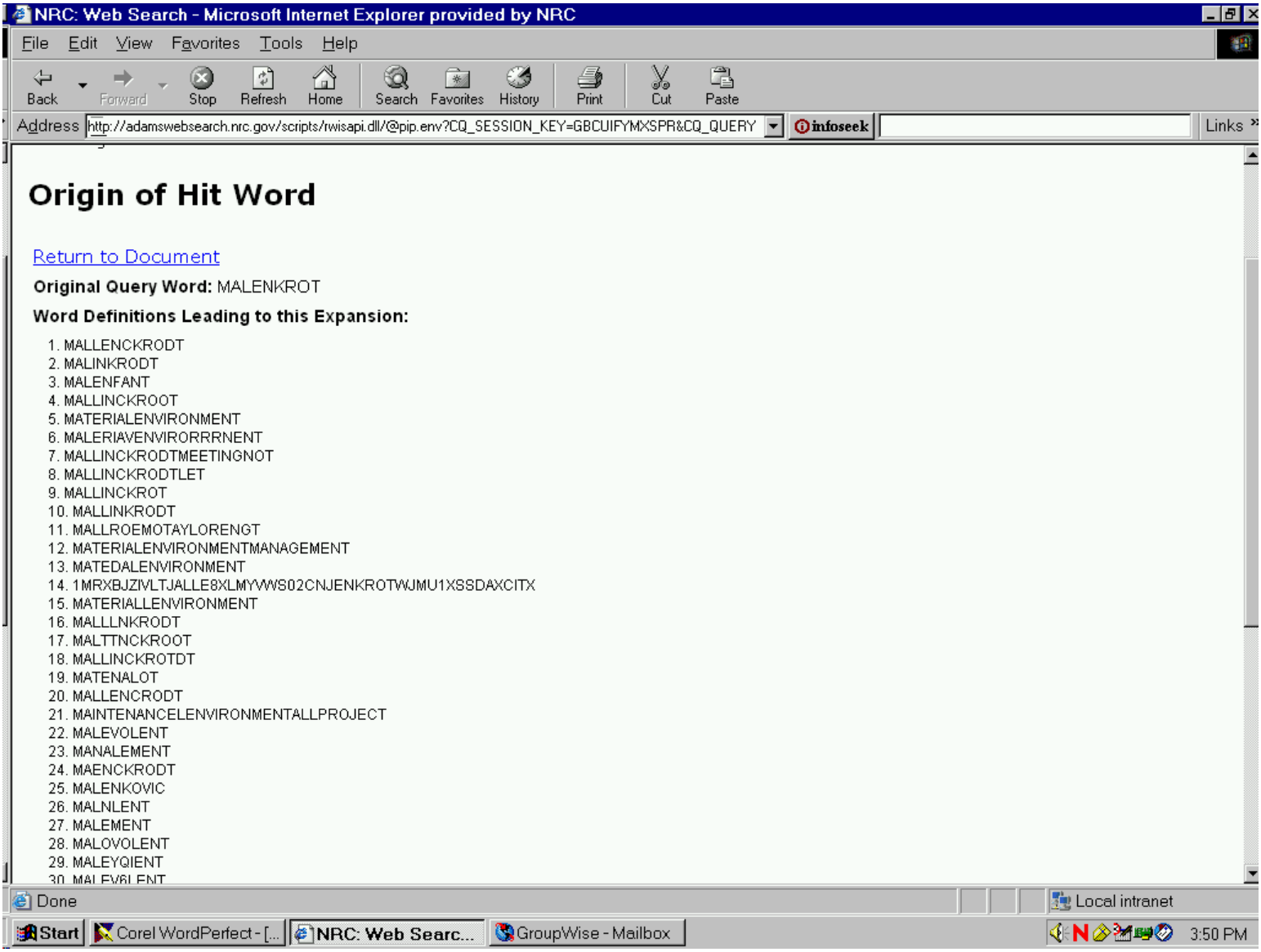
Go to Best Hit: Go To Best Hit takes goes to one place in the file where the search term(s) appear. The search term(s) will be bolded. However, the browser tool bar, using EDIT/FIND can also be used search for any terms within the file.

Find More Documents Like This One: If this particular document is exactly the kind of information needed, a search for other documents like this one can be performed by the system. Find More Like This **deletes the previous search**. It uses the open document and indexes all of the words to determine the 50 most prevalent words, then searches the entire database by those 50 words to find more like this one.

Use **Find More Like This** if you are looking for information in general. If what you want is a specific type of document on that subject, such as other LERs or inspection reports on the subject, it would be better to use the fields in Advanced Search.



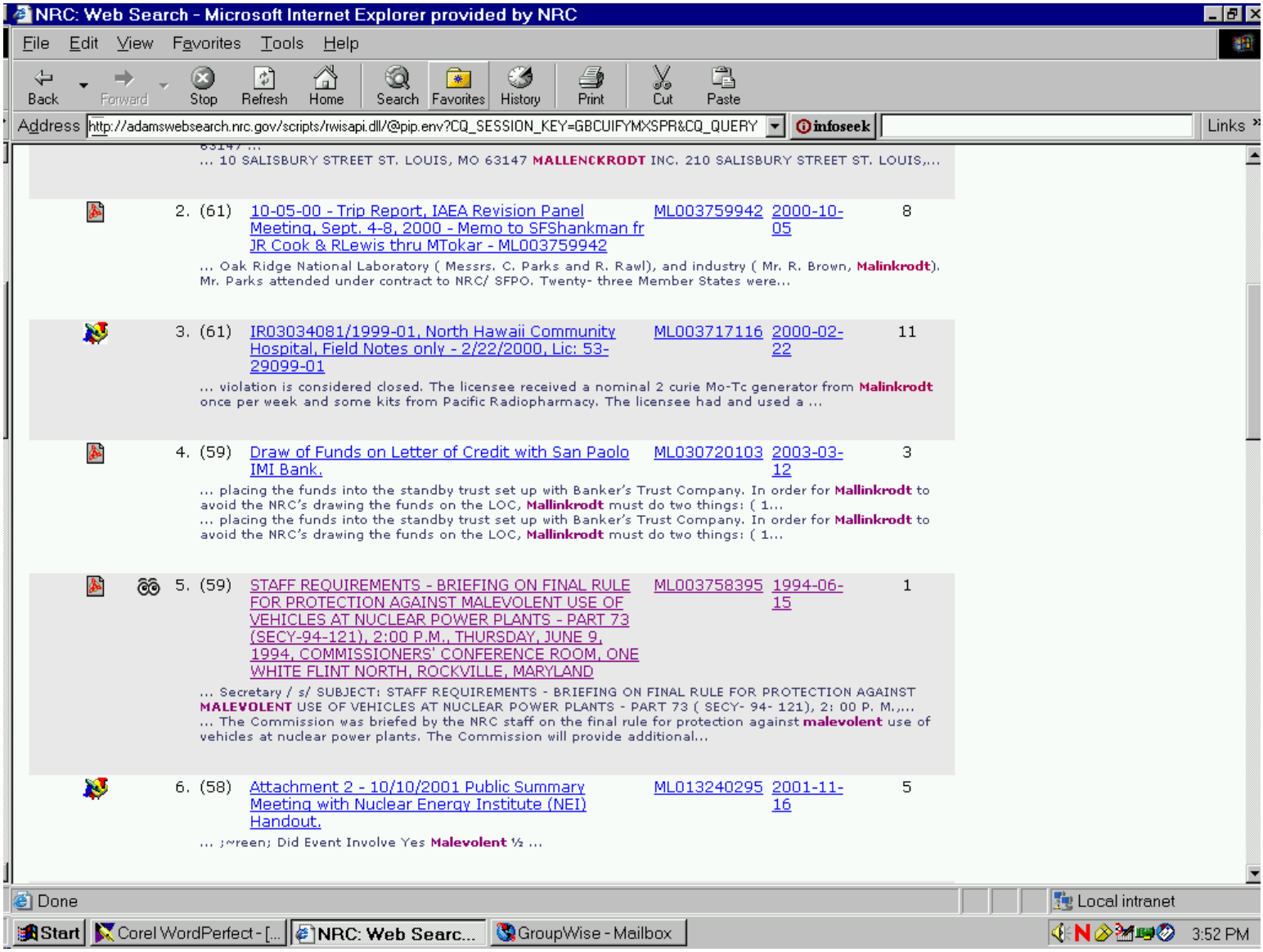
Ask Why: When the text of a document is opened, the **?** appears after the bolded term. This is the "**ask why**" feature. It explains why a particular word was found as a search hit. Click on the **?**, to see the letter patterns that were found. The system limit is 50 word patterns. Some are variations of spelling and some the result of the OCR process.



When returning to the initial results page using **Return to Results**, a pair of **eyeballs** will appear to indicate a document has been opened and viewed. This is the "Already seen" feature of RetrievalWare.

Just as in Citrix-based ADAMS, there are two **kinds of files**, TIFF and PDF. As of June 2003 all future documents in ADAMS will be in pdf format. The image file in the Web-based ADAMS comes from Filenet and the icon symbols are the same as those used in Citrix-based ADAMS. The **text** comes from RetrievalWare.

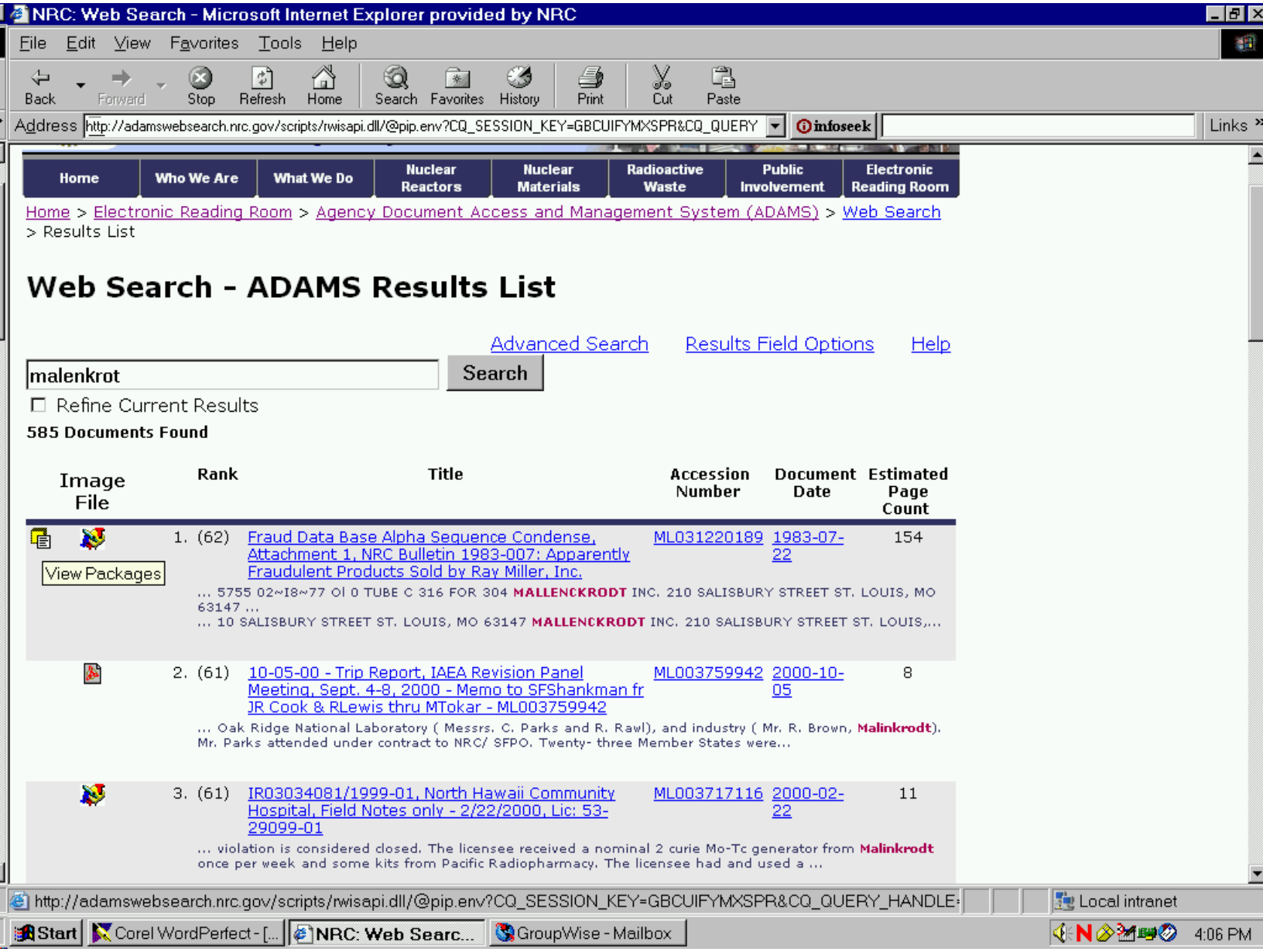
Selecting the **image file icon** will open the image of the document. When a document is opened in the web search to view it, the system is actually downloading the image file from the Filenet repository server to a temporary file on the PC. Because it is in fact downloading the file, it could take several minutes for the document to open.



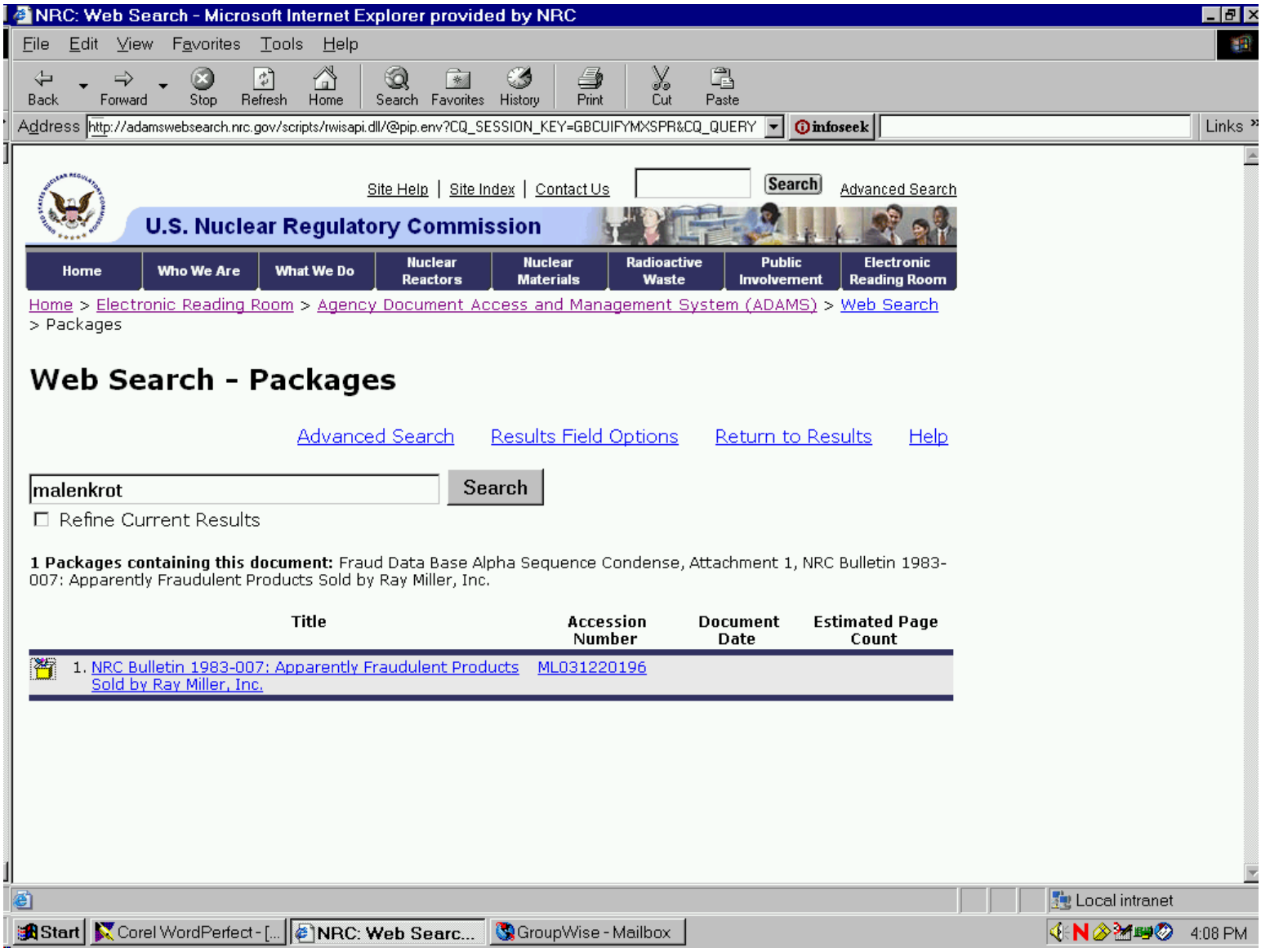
Once the document is open, **saving** the file to a local drive is virtually instantaneous, because all the system is doing is moving the document from this temporary file to a file on the hard drive.

In Citrix-based ADAMS the documents open quickly for viewing, but it can take several minutes to save a large file. With the Web-based ADAMS, opening a document is slower.

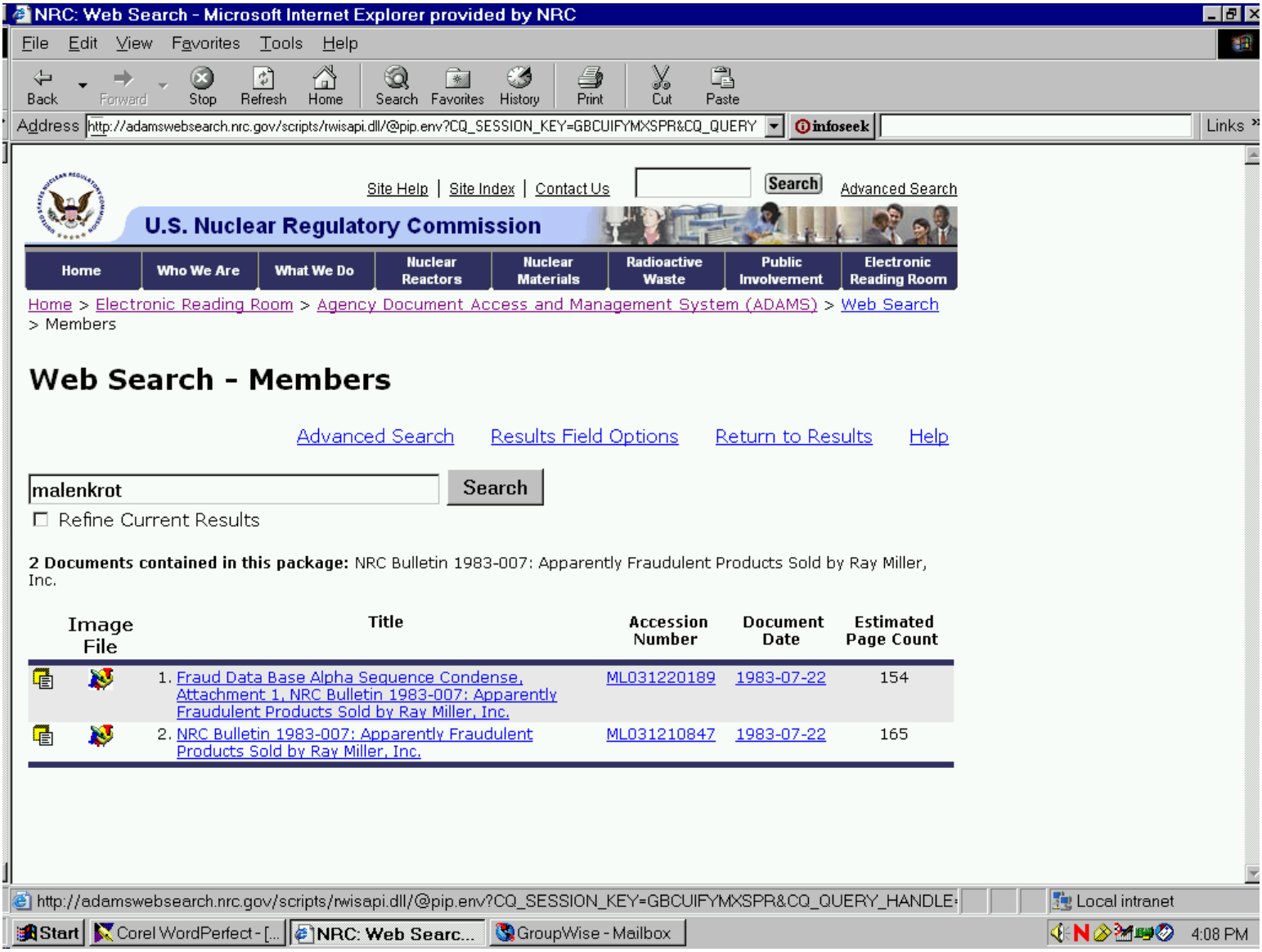
The **package indicator** *symbol is to the left of the document icon.* This symbol indicates that this document is a part of a package. By selecting the package indicator, the title of the package will display.



The display will use the **package symbol** familiar from the Citrix-based version of ADAMS.



By selecting the package symbol, the **members** of the package will be displayed. With RetrievalWare it is immediately apparent if a document is part of a package. All the members of the package can be quickly seen and accessed. To open the documents, use the Image icon. At this point the document can be viewed/printed/saved.



c:\ADAMS\Websheet.wpd

October 17, 2003