ENGINEERING REPORT ER-008E

COST ESTIMATE OF DIGITAL TELEVISION (DTV) CONVERSION

FOR

CANADA

PRESENTED

TO

CANADIAN RADIO-TELEVISION & TELECOMMUNICATION COMMISSION (CRTC)

SIGNATURES

This report has been completed by the undersigned:

Patrice Lemée, ing., P. Eng

OIQ # 127143
Spectrum Expert Inc.

François O. Gauthier, ing., P. Eng

OIQ # 116334
Spectrum Expert Inc.

The signed original version is kept on file at Spectrum Expert Inc.

Table of Content

Tables and Figures

1. ACKNOWLEDGEMENT

We would like to thank the following suppliers for their prompt response. It was essential to have budgetary prices for this study and we wish to thank them for allowing us to publicly disclose this information.

NOVANET – MSC

SBRF

R&S

LARCAN

TELESAT

ACURA TECHNOLOGY GROUP

Special thanks to the following friends and colleagues from the broadcast industry for their time and expertise:

Johanne Lebuis, Eric Pefau, Jim Adamson, Howard Tulloch, Jacques Létourneau, Normand Hubert and Michel Portugais.

Merci!

2. EXECUTIVE SUMMARY

The Canadian Radio-television and Telecommunication Commission (CRTC) has announced that, on August 31st 2011, the Over-the-Air (OTA) television stations must cease analog (NTSC) transmission. The Digital Television (DTV) post transition plan has been negotiated between Industry Canada (IC) and the Federal Communication Commission (FCC) and this plan was publicly released on December 23rd, 2008.

The purpose of this document is to provide budgetary estimates for the conversion of analog OTA television stations to DTV for the Canadian market. The basic assumption underlying the estimates is the duplication of the current analog service contour, while remaining limited to the maximum technical parameters in the DTV post transition plan in all cases (see section 4 and 5 for details). Three studies were commissioned:

Study 1 - Complete Service Replication[1] provides the most realistic DTV duplication of the analog service, which better accounts for the digital cliff effect and the current state of digital reception equipment.

Study 2 - Limited Service Replication[2] reproduces the analog service using the method proposed by Industry Canada and the FCC. This approach may result in a loss of coverage for households that were able to receive analog service, especially in the fringe area (limits of the coverage).

The above 2 studies assume that broadcasters implement DTV facilities on the channel identified in the DTV post transition plan.

Study 3 - Practical Service Replication is identical to Study 2, but assumes that all stations in markets where the population is less than 300,000 will re-use the same channel as the analog station in order to reduce costs. This represents mainly VHF stations (TV channels 2 to 13).

With regards to the estimates, it must be understood that all quotations provided by the different manufacturers used in these studies are budgetary estimates based upon the list price of their products. Product prices were based upon prevailing Canadian to US dollar exchange rate and as such may vary over time. Also, additional Supplier discounts at time of purchase are likely to reduce the final equipment cost.

Estimates assume a complete rebuild of transmitter and broadcast equipment (no retrofits were considered), regardless as to whether transitional DTV facilities have been constructed. When a station however, was using the same DTV channel as the NTSC channel, the antenna and transmission line were considered reusable. Cost for the provision of test equipment is not included in the summary table but is included as optional in individual budgetary estimates provided in the

[1] For study 1, the Digital Service Contours are based on F(90,90) propagation curves.
[2] For study 2 and 3, the Digital Service Contours are based on F(50,90) propagation curves.

report ***Reference Data for DTV Costs Analysis***[3]. Costs also include the engineering brief, factory compliance tests for antennas and for coverage measurements after implementation.

For all stations in markets where the population exceeded 300,000+, contour calculations were performed systematically[4] to best match the existing analog service contour, according to each study case. Estimates for stations serving population less than 300 000 were based on typical scenarios based on the class of the stations.

The costs are broken down into the following station sub-categories:

Transmitters	Number of stations	Total cost for Study1	Total cost for Study 2	Total cost for Study 3
Serving populations greater than 300,000	95	$76,986,076	$65,228,574	$65,228,574
Serving populations lower than 300,000, with local programming	257	$139,174,668	$125,172,525	$48,800,844
Serving population lower than 300,000, without local programming	386	$208,762,002	$187,758,788	$73,200,665
Grand Total[5]	**738**	**$424,922,746**	**$378,160,088**	**$187,229,883**

Table 1 - Summary Cost for the DTV Conversion for Canada

The following table highlights the costs variations per frequency band:

Cost per Implementation	VHF	UHF
Cheapest	$209,231	$203,606
Median	$386,885	$302,455
Average	$246,718	$1,033,954
Maximum	$1,371,825	$4,327,838

Table 2 - Costs Variations per Frequency Band for study 2

[3] The *Reference Data for DTV Costs* analysis is freely available on Spectrum Expert's web site : www.spectrumexpert.ca

[4] For each site, Industry Canada's « F » curves were fitted with CRC-COVLAB modeling software so that the average coverage of the digital transmission curves was geographically matching the analog transmission curves (see section 5 for details)

[5] Budgetary precision of +/- 25%

3. INTRODUCTION

The objective of these studies is to provide a budgetary estimate to convert all OTA stations in Canada. The studies do not evaluate in detail, all different possible scenarios, but rather provide reasonable cost estimation within each defined category. The main focus of the preliminary studies is to initiate discussion regarding the DTV conversion within the broadcaster industry. Given the limited time to complete the studies, it was impossible to do an exhaustive analysis for each particular site. It is a known fact that each case is different, but in these studies, the approach was based on the most common scenarios.

In the NTSC database from IC (as of December 31st, 2008), there are 738 protected analog stations and 1291 Low Power (LP) analog television transmitters. As of July 2008 in Canada, only 28 DTV transitional transmitters had been licensed. Based on these numbers, the CRTC has decided to retain the services of an independent broadcast engineering consulting firm (YRH/Spectrum Expert) to conduct a financial and technical analysis for the DTV conversion of all analog OTA stations in Canada.

Three (3) different studies were evaluated in this document. The first study provides realistic DTV coverage duplication of the analog service, which better accounts for the digital cliff effect and the current state of digital reception equipment (using F(90,90) model). The second study reproduces the analog service using the method proposed by Industry Canada and the FCC (using F(50,90) model). This approach will result in a loss of coverage for households that were able to receive analog service, especially in the fringe area (limits of the coverage). The above studies assume that broadcasters implement DTV facilities on the channel identified in the DTV post transition plan. The final study is identical to Study 2, but in order to reduce cost, assumes that all stations in markets where the population is less than 300,000 will re-use the same channel as the analog station in order to reduce costs. No evaluation of the spectrum availability of the channels considered in study 3 has been performed.
Most of the stations are VHF (TV channels 2 to 13). It represents 117 VHF stations.

Each study is based on the same five (5) scenarios. The first part of the document will be devoted to the presentation and description of the studies and scenarios, including our assumptions and exclusions. The second part we will present our methodology of calculation and evaluation of the NTSC and ATSC parameters. Thirdly, a technical description of the scenarios is presented, explaining all components selected to build the new DTV stations.

After the basic parameters will be defined, budgetary estimates are evaluated for each scenario. The detailed (individual) budgetary estimates are based on the document ***Reference Data for DTV Costs analysis***, provided on the Spectrum Expert web site (www.spectrumexpert.ca), which could help most broadcasters with their specific needs. Because most of the broadcasters are still in the planning phase of the conversion to DTV, it is unknown at this time what type of program feed the stations will be using. Therefore a separate estimate is provided to install a satellite dish. This price is an average between the southern installation and the northern installation. Also, a separate budgetary estimate for off-air equipment and digital microwave is provided.

Additionally, a budgetary estimate is provided to retrofit NTSC transmitters in section 8.

As well as the budgetary estimates for the conversion to DTV for the above stated scenarios, a table representing the different power consumption of the new DTV transmitters, compared to the NTSC transmitters for an equivalent coverage, is provided.

A table representing the expected depreciation of the ATSC equipment is also presented in comparison to the NTSC equipment

Finally, a strategy is presented for a conversion of a typical station. This provides the time scale to be considered for the conversion to DTV.

4. DESCRIPTION OF THE SCOPE OF WORK

4.1 Studies Definition

Three (3) different studies are presented in this document. Each study is based on the same scenarios but the conversion parameters, and hence the costs differ.

Study 1 - Complete Service Replication: The first study is based on a complete service replication to provide the most realistic DTV coverage duplication of the analog service. This better accounts for the digital cliff effect and the current state of digital reception equipment. It is based on the propagation model F(90,90).

Study 2 - Limited Service Replication: The second study is based on a limited service replication to reproduce the analog service using the method proposed by Industry Canada and the FCC. This approach will result in a loss of service for households that were able to receive analog service, especially in the fringe area (limits of the coverage). It is based on the propagation model F(50,90).

The above 2 studies assume that broadcasters implement DTV facilities on the channel identified in the DTV post transition plan.

Study 3 - Practical Service Replication: The third study is identical to Study 2, but assumes that all stations in markets where the population is less than 300,000 will re-use the same channel as the analog station in order to reduce costs. This lowers the cost of conversion to DTV for those stations. It is also based on the propagation model F(50,90).

4.2 Scenarios Definition

The following is a general description of scenarios selected for the studies:

A. Transmitter category serving a population greater than 300,000 people

Conversion of all the stations in the Canadian markets serving populations greater than 300,000. The following list was sorted from 2006 Canada Census : Toronto (Mississauga, St-Catharines-Niagara), Montréal, Vancouver (Surrey), Ottawa-Gatineau, Calgary, Edmonton, Québec city (Lévis), Winnipeg, Hamilton (Burlington), London, Kitchener (Cambridge, Waterloo), Halifax, Oshawa (Whitby, Clarington), Victoria,(Saanich), Windsor. In this scenario, budgetary estimates will be provided for each NTSC station. Two categories can be identified: A site that remains on the same channel after conversion to DTV and a site that will have a different channel in DTV.

B. Transmitter category other than category A with local programming(i.e. less than 300,000 people)

Conversion of all stations in small and medium markets where broadcasters are producing local programming. This is considering all other stations that are not covered in scenario A, with the exception of Low Power (LP) stations, with local programming.

C. Transmitter category other than category A without local programming

Conversion of all stations in small and medium markets where broadcasters are not producing local programming. This is considering all other stations that are not covered in scenario A, with the exception of Low Power (LP) stations, without local programming.

For sites that will continue to operate on the same channel after post-transition in scenarios B and C, a summary table in section 11 will presents the number of transmitters per category (ATSC transmitter power) multiplied by the cost estimate for this category. For sites that will operate on a different channel after post-transition period, a budgetary estimate was done according to the specific parameters of each station.

D. Typical Low Power transmitter site operating on the same channel in DTV

Conversion of a typical LP station operating on the same channel in DTV

E. Typical Low Power transmitter site operating on a different channel in DTV

Conversion of a typical LP station operating on a different channel in DTV. The cost provided will be for a station that will change from VHF to UHF, resulting in a complete new transmission system design (not re-using existing transmission equipment).

4.3 Assumptions and Exclusions

In order to derive more than 700 budgetary estimates in a short period of time, assumptions have to be made. Therefore, basic information was assumed and resulted in calculated parameters which may be different from the real operating parameters of the station. For example, the IC database does not provide the transmitter power, nor the antenna system gain. Those have to be calculated based on commonly known engineering design constraints. For this reason, antenna gains and transmitter power might differ from the real implementation, but the final ERP values will be the same.

It is also understood that some calculations will not be realistic (some higher, some lower) but the overall results should be accurate within 25% (budgetary estimate level of accuracy).

4.3.1 General Basic Assumption and Exclusions

The general assumptions in this section can be applied to the whole studies. These assumptions should be considered as guidelines in order to limit the scope of the studies. Following is a list of the basic general assumptions:

- This document is only considering the scenarios where broadcasters are switching directly to post-transition parameters. There is no consideration of re-using equipment purchased for the transitional DTV plan.
- The stated costs are budgetary estimates with a variance of ±25%.
- This document covers the portion of the signal from the output of the studio to the transmitter. No cost associated with digital studio conversion is considered.
- All prices in the budgetary estimates are based on actual budgetary quotes received by manufacturers and are included for reference in annex C of document entitled ***Reference Data for DTV Cost Analysis*** located on Spectrum Expert web site (www.spectrumexpert.ca).
- It is unknown what type of program feed the stations will be using. Therefore, a separate budgetary estimate is provided for the provision and installation of a satellite dish. This price will be an average between the southern installation and the northern installation. Also, a separate budgetary estimate for off-air equipment and Studio-to-Transmitter Link (STL) is provided. Budgetary estimated can be found in annex B of document entitled ***Reference Data for DTV Cost Analysis*** located on Spectrum Expert web site.
- All stations will remain at their existing transmission facilities using present average EHAAT parameters. There will be no cost associated for new land and/or building for the new DTV service. Therefore, it is assumed that there is enough space available for the installation of the new DTV service.
- Tower strengthening and tower upgrades to meet CSA S37-01 ANTENNAS, TOWERS and ANTENNA-SUPPORTING STRUCTURES codes are not considered in the estimates. No cost has been allocated to upgrade towers to meet the code or for antenna installation. Therefore, an additional amount must be considered to our budgetary estimate when a new antenna is installed.
- No cost associated with the analogue equipment being replaced before the end of its normal replacement cycle, due to the conversion to DTV, will be considered.
- No cost associated to the depreciation related to existing DTV stations will be considered.
- No cost associated to the depreciation related to the need to change channel of operation will be considered.
- All start-up expenses and labour will be considered within each budgetary estimate.

- The grade B coverage of existing NTSC stations will be replicated based on the three (3) different studies' approach. Systematic coverage analysis to find the ATSC replication parameters will be done only for the major markets (300,000+). See section 5 for details.

- No frequency coordination has been verified from the IC DTV database for the study 1 and 2. For study 3 (stations in market less than 300,000 re-using the same channel as the analog channel), no verification on the spectrum availability of the channels selected has been performed.

- No retrofit of any NTSC transmitter to DTV will be considered in this estimate report. Without knowing the details of the transmitter, a cost cannot be provided due to the risk of drastically underestimating the cost of conversion to DTV. Only a separate budgetary cost will be provided in section 8.

4.3.2 Assumptions Related to Specific Scenarios

A) Transmitter category serving population greater than 300,000

In this section, specific sites were selected based on the 2006 census. The following are the assumptions for this scenario:

- In this scenario, we assume that 4 sites out of 5 are fed via a Studio-to-Transmitter Link. This link will have to be converted to digital. The remaining sites will be considered as using landline distribution. The costs for landline distribution will not be evaluated in this study.

- Transmitter and monitoring equipment will be installed in parallel with the existing NTSC equipment to avoid disruption of service. Therefore, a budget provision for the electrical, mechanical and architectural modifications to the building will be considered. The on-site installation time will be higher due to the complexity of providing co-location of services.

B) Transmitter category other than section A with local programming

As explained earlier, categories B and C represent all the stations that service less than 300,000 people (excluding Low Power transmitters) and where local programming is being produced. The following are the assumptions for this category:

- 2 sites out of 5 are fed via a Studio-to-Transmitter Link (STL). This link will have to be converted to digital. All other sites will be considered as using landline distribution. The costs for landline distribution will not be evaluated in this study.

- Transmitter and monitoring equipment will be installed in parallel with the existing NTSC equipment to avoid disruption of service. Therefore, a budget provision for the electrical, mechanical and architectural modifications to the building will be considered.

- The scenario will present one budgetary estimate for each group of different transmitter power category (not station-specific) for stations that will operate on the same channel in DTV. Station-specific budgetary estimates will be provided for stations that will operate on a different channel in DTV.

C) Transmitter category other than category A without local programming

This section represents the same category as category B for sites where no local programming is being produced. The following are the assumptions for this category:

- No STL is required in this configuration. All sites will be considered as using landline distribution. The costs for landline distribution will not be evaluated in this study.
- Transmitter and monitoring equipment will be installed in parallel with the existing NTSC equipment to avoid disruption of service. Therefore, a budget provision for the electrical, mechanical and architectural modifications to the building will be considered.
- This scenario will present one budgetary estimate for each group of different transmitter power category (not station-specific) for stations that will operate on the same channel in DTV. Station-specific budgetary estimates will be provided for stations that will operate on a different channel in DTV.

D) Typical Low Power transmitter sites operating on the same channel in DTV

Low Power stations would be allowed to continue broadcasting in NTSC after 2011, but will be considered a secondary allocation, as Industry Canada indicated. Therefore LP estimates are not as detailed as the previous categories. In this section, a budgetary estimate will be prepared for a typical low power transmitter site that will continue to operate on the same channel in DTV. The basic assumptions are as follows:

- The distribution link that feeds the program to the station will not be considered in this estimate.
- As explained in the 'General basic assumptions', a separate cost estimate will be provided for the installation of a satellite dish (and associated equipment) and another cost estimate for off-air reception. Appropriate scenarios can therefore be built with these estimates.
- NTSC transmitter and monitoring equipment will be removed from their existing location and then the ATSC equipment will be installed. Due to the small dimension of LPTV building, it is preferable and less expensive to proceed this way. A disruption of service is anticipated. A small budgetary provision for electrical, mechanical and architectural modifications to the building will be considered.
- A higher budgetary provision for the installation will be considered for this scenario due to the greater distance of the LPTV sites from major centers, and the mobilisation and the mobilization of demobilization of specialized workers.

E) Typical Low Power transmitter sites operating on a different channel in DTV

In this section, a cost estimate will be prepared for a typical low power transmitter site that will operate on a different channel in DTV. The assumptions are identical as those presented for the category D stations.

4.3.3 Source of information

The information for the NTSC stations was taken from the latest Industry Canada database released on December 31st, 2008. The information on the DTV channel allocation was derived from the DTV allotment plan released on December 23rd, 2008.

Budgetary prices used in the cost estimates are based upon recent official quotes from various suppliers and manufacturers. The quotes can be found in Annex C of document entitled ***Reference data for DTV costs analysis*** located on Spectrum Expert web site (www.spectrumexpert.ca).

5. METHODOLOGY AND CALCULATION

In order to evaluate the cost of the DTV implementation, one of the most critical components is the transmitter power. Unfortunately, the NTSC and DTV databases from Industry Canada (IC) only provide the Effective Radiated Power (ERP). The ERP value alone does not provide any information regarding the transmitter power nor the antenna gain, which therefore had to be estimated.

It is important to remember that one of our basic assumptions is that the grade B contour of existing NTSC stations will be replicated by the DTV stations (based on each studies' parameters) as opposed to implementing the maximum parameters permitted in the IC database. So to evaluate the DTV transmitter parameters, we firstly had to derive the NTSC parameters.

It should also be noted that the NTSC parameters are derived using engineering best practices rules of implementation and therefore might differ from reality. As per example, the antenna gain selected in our report might not be able to be implemented in some situation where tower spacing is limited. But, in all cases, the resulting ERP will always be the same as in the IC database (balance between antenna gain, transmitter power and other losses).

5.1 NTSC Parameters Evaluation

For scenarios where the DTV channel is identical to the NTSC channel, we considered that the new DTV implementation will use the same NTSC antenna system and transmission line (see section 5.2). To find the antenna gain of each service, we derived it from the average ERP in the database using the following formula:

$$ERPavg = Antenna\ Gain - System\ losses + Transmitter\ Power$$

The three (3) unknowns in this formula are: the antenna gain, the system losses and the transmitter power. Thus, the system losses and the transmitter power had to be assumed, based on industry standard implementations.

First, the easiest variable to establish was the system loss. The losses are based on the transmission line and an additional loss factor to account for all losses due to interconnecting hardware. The distance of the radiation center of the antenna system is used to obtain the length of the transmission line plus an additional 15 meters to cover the average distance between the tower and the entrance of the transmitter building. A loss of 0.35dB was factored in for the interconnecting hardware.

Before evaluating the transmission line size in relation to the transmitter power, it was essential to determine the line capacity based on a VSWR worst case. The following formula was used to determine the derating factor of the transmission line based on a VSWR 1.5:1 for worst case operation:

$$Derating\ Factor = \left(\frac{\mathrm{VSWR}^2 + 1}{2 \times \mathrm{VSWR}}\right) + \left(\frac{F1 \times (\mathrm{VSWR}^2 - 1)}{2 \times \mathrm{VSWR}}\right)$$

Where F1 can be found on the following graph:

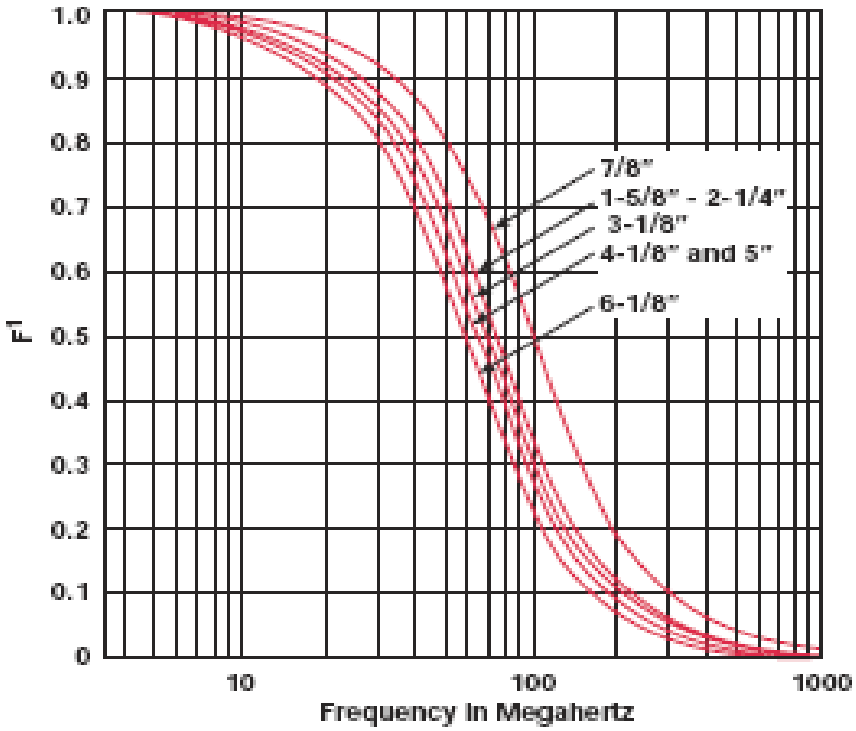


Figure 1 - Derating Factor vs Frequency due to VSWR (Average Power)

The following transmission lines were selected in our assumption[6]:

Tx line size (air)	Transmission Line Derated Average Power for TV Channel 2-6 (50MHz)	TV Channel 7-13 (200MHz)	TV Channel 14-69 (600MHz)
7/8'' (foam)	7.6 kW	4.5 kW	2.6 kW
1-5/8''	17.5 kW	10.1 kW	5.8 kW
3''	46.7 kW	25.4 kW	13.5 kW
4''	71.6 kW	39.3 kW	21.4 kW
5''	93 kW	51.8 kW	29 kW

Table 3 - Derating Factor for Average Transmitted Power Based on VSWR 1.5:1

After we have determined the maximum power permitted for each transmission line size, a transmitter power range was derived from an ERP range. This exercise was essential to assign a line size to each station while respecting the line capacity and it was done for each frequency band. Using these results, the transmission line losses were then calculated for all stations[7].

The following table represents the ERP range associated with an estimated transmitter power with the resulting associated transmission line size. The estimated transmitter power must respect the upper limit of the maximum capacity of the de-rated transmission line, while not over-estimating the line size. The following table highlights the assumptions that were made to best match each transmitter power with an adequate transmission line:

ERP(KW)	Tx Power(KW) Refer to line derating power	BAND	ANDREW MODEL	LINE TYPE	ATT.(dB/100m)
600+	30-60KW	UHF	HJ9HP-50	5'' HP	0,737
280-600	20-30KW	UHF	HJ9-50	5''	0,695
250-280	10-20KW	UHF	HJ11-50	4''	1,04
6-250	5-10KW	UHF	HJ8-50	3''	1,33
6-325	15-30KW	L-VHF	HJ8-50	3''	0,316
6-325	10-20KW	H-VHF	HJ8-50	3''	0,688
1-6	2-5KW	UHF	HJ7-50A	1-5/8''	1,73
1-6	5-15KW	L-VHF	HJ7-50A	1-5/8''	0,465
1-6	2-10KW	H-VHF	HJ7-50A	1-5/8''	0,958
0,01-1	0,01-2KW	UHF	LDF5-50A	7/8'' foam	3,1
0,01-1	0,01-5KW	L-VHF	LDF5-50A	7/8'' foam	0,833
0,01-1	0,01-2KW	H-VHF	LDF5-50A	7/8'' foam	1,72

Table 4 - Transmission Line Size Associated with Range of ERP

The line attenuation was calculated as described earlier, based on the attenuation from the manufacturer. For each frequency band, when the data was available, it was referenced to the

[6] The calculation can be found in annex B.
[7] The transmission line losses are based on Andrew Corporation catalogue 38.

attenuation for the middle of the band. For Low VHF, the attenuation selected was for 50MHz. For High VHF, the attenuation selected was as for 200MHz. For UHF, the attenuation selected was for 600MHz. The line was selected from Andrew's catalogue and the attenuations are shown on the following graph[8]:

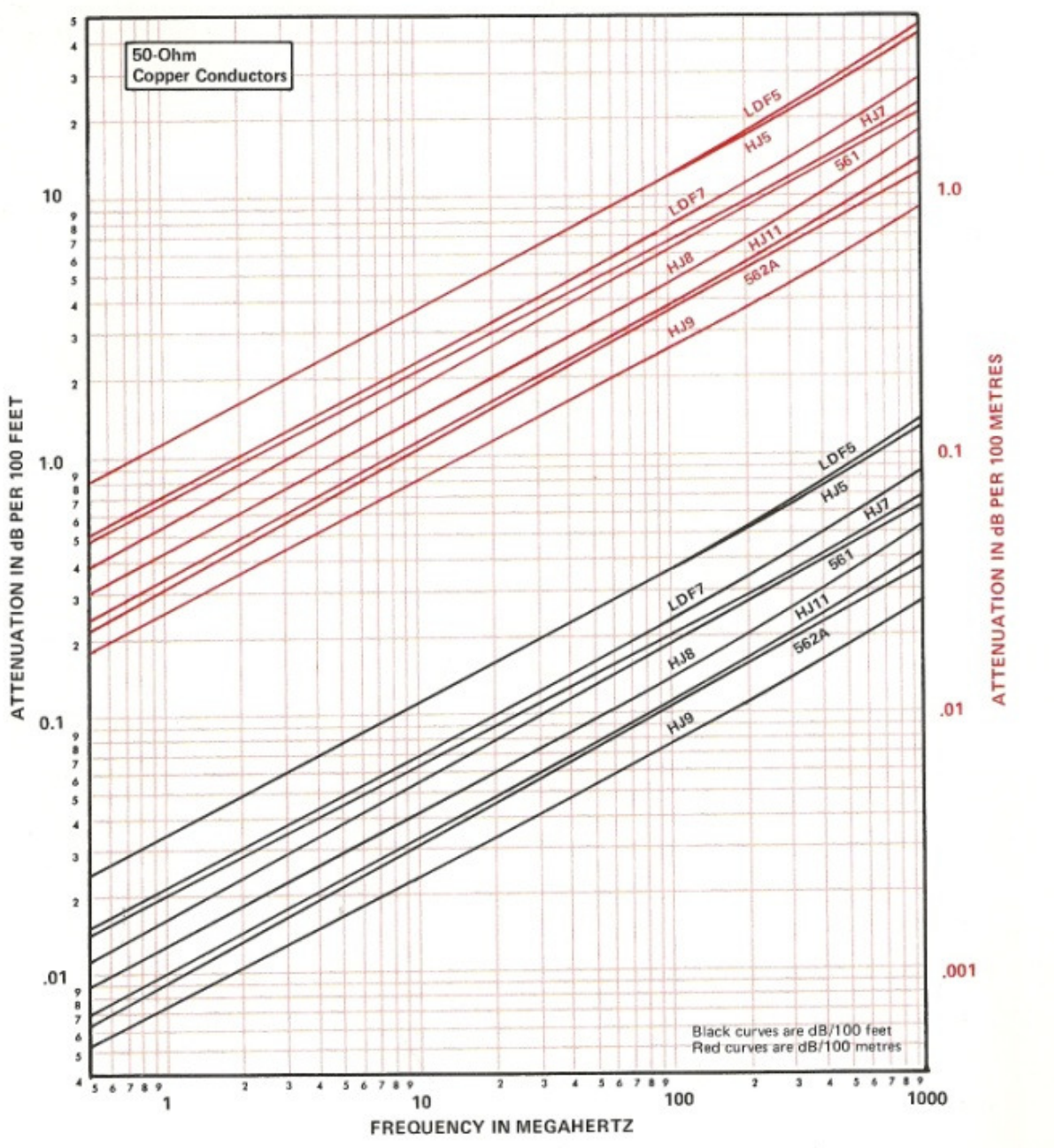


Figure 2 - Transmission Line Attenuation vs Frequency

[8] In Andrew Bulletin 1063H (Broadcast Transmission Line System)

To estimate the transmitter power, we considered the various transmitters available on the market[9]. The following table represents the NTSC transmitter powers that were considered for this study:

VHF BAND		UHF BAND	
Transmitter model	Transmitter Power (W)	Transmitter model	Transmitter Power (W)
MX series	1	MX series	1
MX series	10	MX series	20
MX series	30	MX series	100
Meridian series	250	Meridian/MX series	1000
Meridian series	500	Meridian/MX series	2000
Meridian/ M series	1000	Meridian series	2500
Meridian series	2000	Meridian series	5000
M series	3000	Eclipse Series	10000
Meridian series	5000	Eclipse Series	15000
M series	6000	Eclipse Series	20000
M series	16000	Eclipse Series	30000
M series	22000	Landmark IOT	40000
M series	30000		

Table 5 - Transmitter Power Available on the Market

The transmitter power selection is the result of an iteration based on the probable antenna gain for the site. If the antenna gain was found to be too high, we increased the transmitter power to the next likely power increment. We tried to maintain a good balance between the transmitter power and the antenna system. For example, we did not consider a 16 bay antenna for a low power transmitter site, nor a 2 bay for a high power site. To be as realistic and practical as possible, the center of radiation of the antenna system was used for the location of the antenna on the tower. When selecting an antenna, the overall dimension of the antenna system was considered and validated with the available antenna aperture on the tower. To evaluate the available antenna aperture, we simply subtracted the radiation center from the vertical height of the proposed antenna. If the proposed antenna height was fitting, we considered that an antenna as such could fit into the tower. For example, we would not select a 4-bay L-VHF antenna system knowing that the tower is 20 meter high and the antenna system itself is 23 meters. There was no consideration of any other antennas on the tower. The following tables show the antenna gains (per bands) that were considered:

UHF model K72 31 4.. Based on KATHREIN Antenna Design		
Number of bays	Panels per bay**	Gain in dBd (referred to half wave dipole)
*1	4	6,3
*2	4	9,3
4	4	12,3
6	4	14,1
12	4	17,1
16	4	18,3
*Approximation of gain, not in catalog **Equal power splitting		

Table 6 - UHF Antenna Selection

[9] Reference to transmitter manufactured by LARCAN.

High-VHF model K 52 33 5.. Based on KATHREIN Antenna Design		
Number of bays	Panels per bay**	Gain in dBd (referred to half wave dipole)
1	4	6,1
2	4	8,9
4	4	11,8
6	4	13,5
8	4	14,7
*12	4	16,9

*Approximation of gain, not in catalog
**Equal power splitting
NOTE: IF ERP avg is < 1KW and band is H-VHF then use antenna gain of 1,7dB Kathrein model K 52 34 5…; if <500 then use antenna gain of 0dB, Kathrein TVO; if <250 then use antenna gain of -3dB, Kathrein TVO;

Table 7 - High-VHF Antenna Selection

Low-VHF model K 52 31 8.. Based on KATHREIN Antenna Design		
Number of bays	Panels per bay**	Gain in dBd (referred to half wave dipole)
1	4	2
2	4	5
4	4	8,1
6	4	9,9
8	4	11,1
*12	4	12,9

*Approximation of gain, not in catalog
**Equal power splitting
NOTE: IF ERP avg is < 55W and band is L-VHF then use antenna gain of -3dB, Kathrein TVO; if <250 then use antenna gain of 0dB, Kathrein TVO;

Table 8 - Low-VHF Antenna Selection

Kathrein antennas were used as reference for the studies. We considered panel antennas for medium and high power sites, arrays from 1 bay to 12 bays in VHF and from 1 bay to 16 bays in UHF. For lower ERP stations in the VHF band, other models were used. For low VHF, the TVO antenna was selected. For stations with ERP between 55W and 250W, the Kathrein TVO 2 bay antenna with a gain of 0dB was used and for ERP lower than 55W, the 1 bay TVO antenna with a gain of -3dB was used. For High VHF, when stations' ERP were between 500W and 1KW, the Kathrein antenna model K52 34 5… with a gain of 1,7dB was used. For stations with ERP between 250W and 500W, the TVO 2 bay antenna with a gain of 0dB was used and for stations lower than 55W, the TVO 1 bay with a gain of -3dB was used. The resulting NTSC parameter assumptions can be found in annex A.

5.2 Study 1 – ATSC Parameters Calculation (site staying on the same frequency)

For study 1, we evaluated the conversion of the analog coverage into DTV using the F(90,90) curves (see 5.6 for study ATSC Parameters). The selection of F(90,90) results from the experience gained from performing many off-air reception tests on consumer receivers. Empirical data demonstrated the difficulties of receiving a good ATSC signal associated with the F(50,90) contours under normal condition (receiving antenna at 9.1m). More information regarding this choice of parameters can also be found in the document *Planning Factors for Fixed and Portable DTTV Reception*[10].

For scenarios where the DTV post transition channel was the same as the NTSC channel, we considered that the antenna system, transmission line and other equipment where the same as for the NTSC installation (or equivalent). Consequently, we used the antenna gain, cable losses and other losses computed using the methodology described in 5.1.

We used the following table (from Draft BPR 10 V2) to derive the equivalent DTV contours:

Channels	Defining field strength, dBu, to be predicted for 50% of locations, 90% of time
2 – 6	28
7 – 13	36
14 – 51	41 – 20 log[615/(channel mid-frequency in MHz)]

Table 9 - Field Strengths Defining Noise-limited Bounding Contours for Primary Assignments (DTV) F(50,90)

As mentioned in the introduction of this section, instead of using the F(50,90) for the targeted DTV contour, we used the same contour values (28, 36 and 41-log) but for F(90,90). We decided to take the prudent approach and applied the F(90,90).

For the NTSC equivalent, we used the following values:

Channels	Defining field strength, dBu, to be predicted for 50% of locations, 50% of time
2 – 6	47
7 – 13	56
14 – 51	64

Table 10 - Field Strengths Defining Noise-limited Bounding Contours for Primary Assignments (NTSC) F(50,50)

[10] Oded Bendov, Yiyan wu and al, Planning Factors for Fixed and Portable DTTV Reception, IEEE Transactions on Broadcasting, VOL. 50. NO 3. Sept 2004, pp 209-223

Also, since the difference in the statistics varies with the frequency band, EHAAT and the distance, we considered the following corrections:

Look-up EHAAT (90,90) -> (50,50)																				
Class/ EHAAT	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000
UHF A	8.3	8.1	8	7.9	7.9	7.9	7.9	7.9	7.8	7.8	7.7	7.7	7.7	7.6	7.7	7.7	7.7	7.7	7.7	7.7
UHF B	11.9	10.4	10.1	9.9	9.8	9.7	9.7	9.6	9.5	9.4	9.4	9.3	9.3	9.3	9.2	9.3	9.3	9.2	9.3	9.3
UHF C	18.3	16.1	15.1	14.3	13.8	13.4	12.9	12.6	12.2	12.1	12	12	12	12	12	12	12	12	12	12
VHF L	15.7	14.1	13.2	11.3	11.3	11.3	11.2	11.1	12.4	12.4	12.3	12.3	12.1	12	11.9	11.9	12	11.9	12	12
VHF H	14.8	13	11.7	12.7	12.4	12.3	12.4	12.5	11	10.9	11.1	11.1	11.2	11.2	11.2	11.2	11.3	11.3	11.3	11.3

Table 11 - Differences Between F(90,90) and F(50,50)

Since we could not fully implement the F(90,90) and F(50,50) curves into our Excel database, we selected the three(3) classes for UHF (A, B and C extracted from the NTSC database) where the maximum distances of 25, 45 and 70 km were used. We used the maximum distances of 89 km and 82 km for the low and high VHF classes respectively. This approach provides more conservative values in terms of equivalent ERP required for the DTV channels.

Finally, for directional antenna sites, since we are considering the same parameters as for the NTSC sites (so the same antenna pattern), we simply calculated the peak-to-average ratio from the NTSC database (because the average ERP was not available in the DTV database).

So, in order to derive the ATSC transmitter power, we used the following formula:

$$ATSC\ TX\ Power = NTSC\ TX\ Power + EHAAT\ Equivalence\ F(50,50) to\ F(90,90) - NTSC\ contour + ATSC\ contour$$

For example, if we consider a class C UHF NTSC transmitter (of 21,500 W operating power) operating on channel 51, we computed the following:

NTSC TX Power: 10 * log (21500) = 43.32 dB
F(90,90) equivalence at EHAAT (for 286.50m) = 13.7 dB
NTSC Contour: 64 dB
ATSC Contour: 42.06 dB
ATSC Transmitter power = 43.32 + 13.7 – 64 + 42.06 = 35.08
ATSC Transmitter power = 3220 W

Once we evaluated the ATSC transmitter power, we recalculated the resulting ATSC ERP by considering the same antenna gain and system losses as for the NTSC system. If the total ATSC ERP was lower than the value specified in the Industry Canada DTV database, we used the newly found value for the study. If the ATSC ERP was greater than the Industry Canada database, we used the IC database value to derive the ATSC transmitter power (using again the NTSC antenna and cable parameters).

5.3 Study 1 – Systematic ATSC Parameters Calculation (different frequency site, 300,000+)

For sites where both the ATSC channel was different than the NTSC channel and the population was above 300,000, we calculated the ATSC parameters using real F(50,50) vs F(90,90) simulations. We simulated the NTSC actual parameters on a map and best matched it to the ATSC simulation (depending on the channel band used). For the ATSC simulations, we considered the same radiation center and antenna pattern associated with the NTSC parameters.

We used the same ATSC equivalent contours as defined in section 5.2. When the calculated equivalent ATSC parameters were above those specified in the IC DTV database, we selected the smallest parameters of the two values, either the calculated or the maximum IC DTV database.

Once the ATSC ERP was evaluated to ensure that the best match with the NTSC contour had been established, a manual interpretation of the best antenna system, depending on the target ERP power, was selected. The ATSC transmitter power was then calculated using this antenna system along with the probable cable and system losses associated with this maximum power were determined as well as the band to be used (as describe in section 5.1).

The ATSC parameters calculated in this study for the stations servicing 300,000 and more people can be found in Annex D.

5.4 Study 1 – ATSC Parameters Calculation (different frequency site, less than 300,000)

In order to derive the ATSC parameters for stations servicing less than 300,000 people using a different ATSC channel than their actual NTSC channel in Study 1, we considered the following:

1. Site staying in the same band: For low-VHF to low-VHF implementation and high-VHF to high-VHF implementation we found that the best approximation for the ATSC parameters was, firstly, to derive the operating NTSC parameters as explained in 5.1. Then, we considered that the ATSC propagation will be the same in the new band so we applied the same criteria as in 5.2 (Tables 9, 10 and 11). We used the same logic for the UHF sites, but we did not correct the ATSC contour value differences when moving across the band. After some cross-checking, we found that, on average, this approach was providing very close values (within 2 dB of error) which was leading to similar hardware implementation (so similar costs). So for the budget estimates, we considered that we would keep the antenna system for sites that will continue to operate in the same band (i.e. L-VHF to L-VHF, H-VHF to H-VHF and UHF to UHF).
2. Site with channel changing band: Since most modifications were a transition from VHF to UHF band, or vice versa, it was found that the maximum parameters from the IC database provided the closest duplication of the coverage, because most simulation required higher parameters and that we could not exceed the IC database parameters. So, even for sites moving from low-VHF to high-VHF, it was found that using the IC database values was the

best approach. The antenna system/transmitter power ratios have been manually entered based on common knowledge of the target ERP value. The cost estimates are based on a new antenna, new line and new transmitter.

5.5 Studies 2 and 3 – ATSC Parameters Calculation (all Scenarios)

The processes to compute the ATSC parameters for Study 2 and 3 were exactly the same as for study 1, with the exception that the F(50,90) curves have been used instead of the F(90,90). This resulted in the modification of the table 10 for the following new table:

Look-up EHAAT (50,90) -> (50,50)																				
Class/ EHAAT	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000
UHF A	1.2	1	0.9	0.8	0.8	0.8	0.8	0.8	0.7	0.7	0.6	0.6	0.5	0.6	0.6	0.6	0.6	0.6	0.6	0.6
UHF B	4.8	3.3	3	2.8	2.7	2.6	2.6	2.5	2.4	2.3	2.3	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2
UHF C	11.2	9	8	7.2	6.7	6.3	5.8	5.5	5.1	5	4.9	4.9	4.9	4.9	4.9	4.9	4.9	4.9	4.9	4.9
VHF L	9.6	8	7.1	6.6	6.3	6.2	6.3	6.4	6.3	6.3	6.2	6.2	6	5.9	5.8	5.8	5.9	5.8	5.9	5.9
VHF H	8.7	6.9	5.6	5.2	5.2	5.2	5.1	5	4.9	4.8	5	5	5.1	5.1	5.1	5.1	5.2	5.2	5.2	5.2

Table 12 - Differences between F(50,90) and F(50,50)

All other rules described in section 5.2, 5.3 and 5.4 apply for the study 2. Note that in the cases where the calculated equivalent contours (in F(50,90)) were greater than the IC database, we used the IC database parameters.

Finally, for the sites that were changing band (mainly from VHF to UHF) and that the population was less than 300,000 people, we used directly the IC database parameters, as in study 1. This will consequently lead to the same budgetary estimates values.

The only difference between study 3 and study 2 is that for the sites that were changing band and for which the population was less than 300,000 people, we considered that the DTV implementation will stay on the same channel as the current NTSC channel. Consequently, we applied the same rules as in section 5.2, but using the F(50,90) curves from Table 12. This generally resulted in a substantial budgetary estimate cost reduction.

5.6 Differences in ATSC contours between studies 1 and 2

The following map (see Annex C for a more detailed version) demonstrates the difference between the Industry Canada NTSC official contour (thick black line), the calculated NTSC contour (dashed red line), the calculated ATSC contour F(90,90) for study 1 (blue line), the calculated ATSC contour F(50,90) for study 2 (pink line) and the ATSC maximum contour F(50,90) (green line), when we applied the case for study 1:

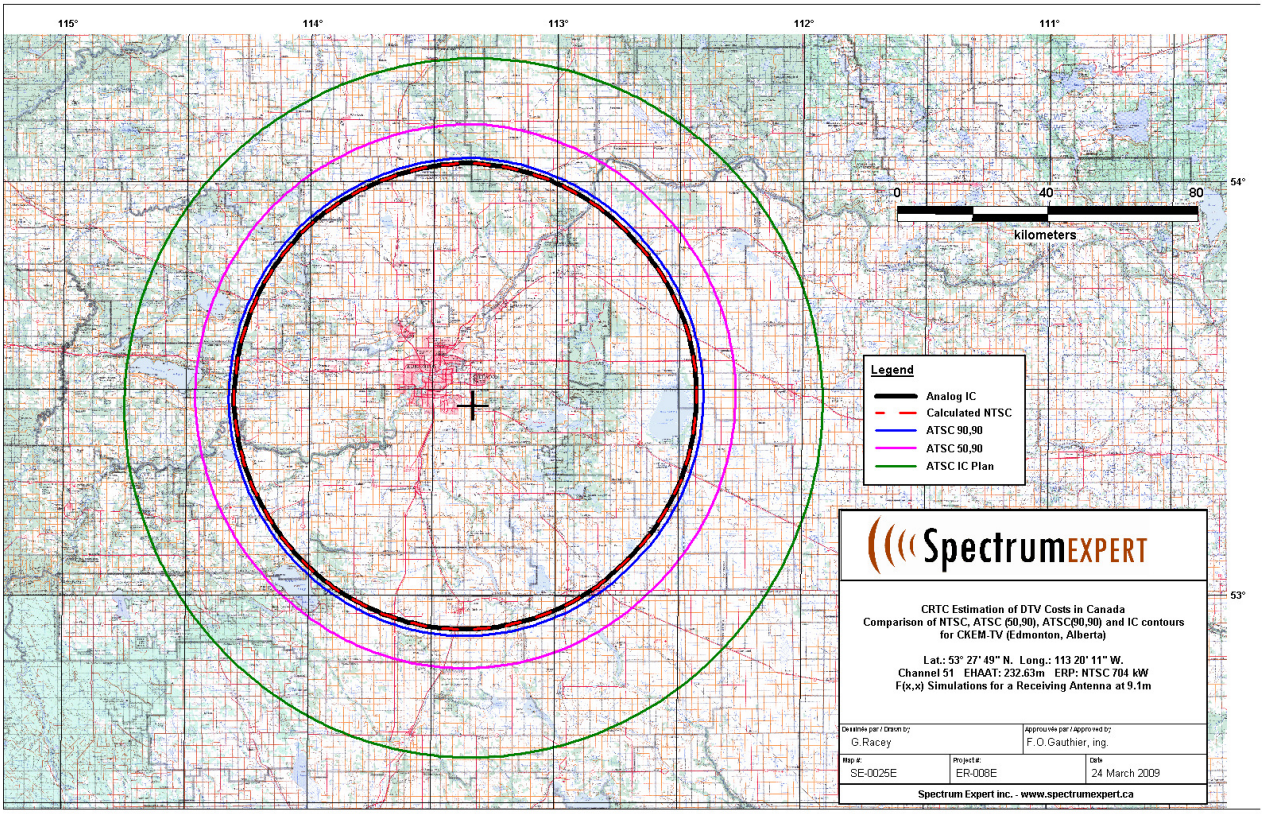


Figure 3 - Coverage Map Presenting the Differences between NTSC and ATSC Contours

As one can see, the calculated NTSC parameters provide us the exact same contour as the IC database contour (black vs dashed red contours). The parameters calculated for the ATSC transmitter power in study 1, provides us a good duplication of the ATSC contour (blue line). The difference on this simulation is about 1.4 dB. This error comes from the interpolation between the F(50,50) curves and the F(90,90) curves for different EHAAT and distances. When we counter-verified some examples, the calculated error was always below 2 dB (plus or minus). Since we could not manually calculate all 732 transmitters, we found that our approach was close enough to approximate a probable service duplication.

In this example, the difference between the F(50,90) and F(90,90) is about 7 dB. This means that for study 2 when we calculated the required ATSC parameters, based on the F(50,90) curves, the total ERP considered was 7 dB less than the one considered in study 1. This 7 dB reduction has been balanced between the antenna gain and transmitter power, based on accepted engineering practices.

Finally, the maximum parameters that the station can implement are represented with the green contour. This, of course, leads to an exceedingly high transmitter power and/or antenna system gain values which very few broadcasters will elect to implement. This is why we only used the maximum IC DTV database parameters when the calculated ATSC parameters were greater than those of the IC database (we used the smallest parameters of the two values, either the calculated or the maximum IC DTV database). This scenario typically occurred for a station migrating from VHF band to the UHF band.

6. TECHNICAL IMPLEMENTATION OF THE SCENARIOS

This section of the document describes the technical design of the proposed DTV station based upon multiple scenarios with corresponding budgetary estimates. All designs are considering only the transmission aspect of the site. Therefore, the program feed is not considered within the technical implementation. It must be understood that the site design is not optimized due to a lack of site-specific information. Many aspects of the design can be changed resulting impact on the cost. This study is generic and should not be considered as final design.

6.1 Transmitter Category Serving a Population Greater than 300,000 People

For this category, since it represents all major cities in Canada, a full redundancy approach was used. From left to right, two (2) ASI Distribution Amplifiers (DA) were used; one (1) for the main feed and one (1) for the back-up feed. The type of feed can be either from fibre, STL or Satellite but the format must be DVB or ATSC ASI.

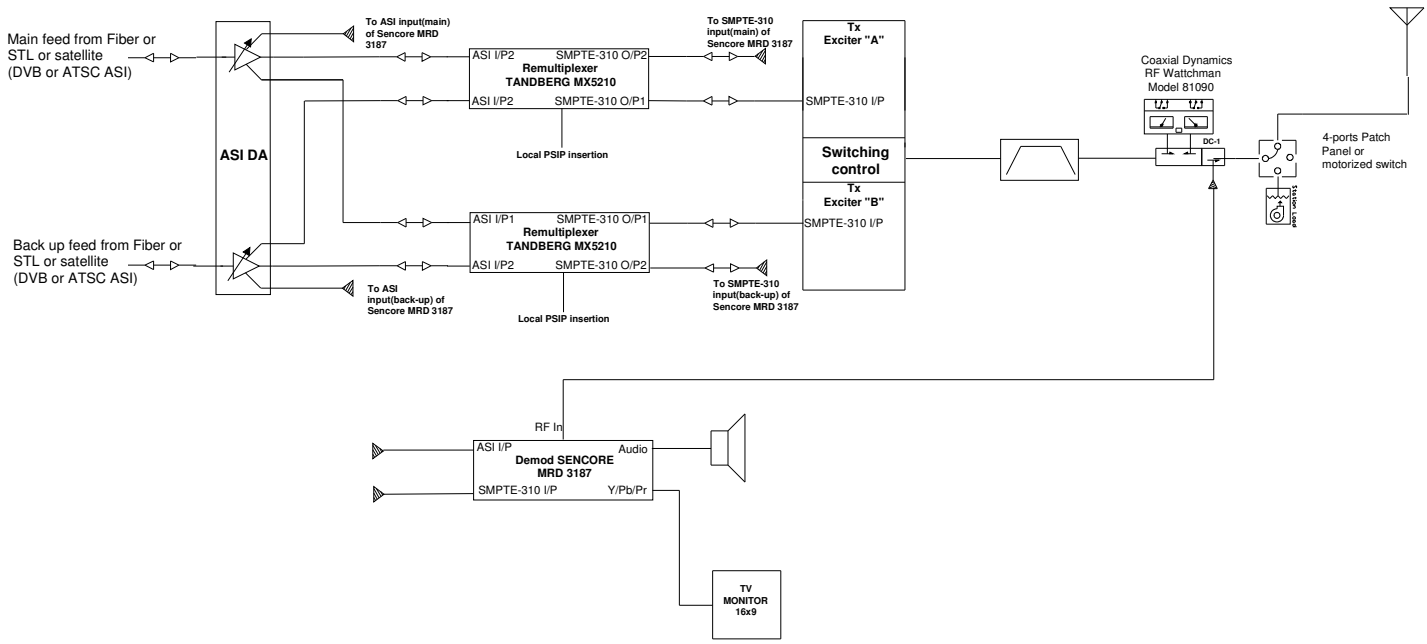


Figure 4 - Typical Schematic for Medium and High Power Station

The outputs of the DA's are feeding two (2) remultiplexers to insert the local PSIP table. The ATSC tables can be sent via a low bit rate channel. Each of the remultiplexer is feeding an exciter to ensure full redundancy. The output of the transmitter is fed through a mask filter sized for the

output power of the transmitter. An RF digital Wattchman is used to monitor the forward and reflected power and to feed the demodulator. The demodulator is used to monitor the audio and video. A 4-port RF patch pane is used to sweep the antenna system and to put the transmitter into the dummy load. No patch panels were included on stations with transmitter output power less than 1KW. For monitoring the signal and for troubleshooting purposes, an ASI jackfield is included.

For higher transmitter power, a transmitter with dual exciter was selected. For lower power, a configuration with dual transmitter and transmitter switching control was selected.

For test purposes, a TV analyzer with ATSC module from Rohde & Schwarz model ETL including module for MPEG and Transport Stream analyzer is included as an option in the design.

6.2 Transmitter Category other than Scenario A

For all stations in small and medium markets (less than 300,000 of population), a similar approach was used. The design is identical as the one presented in the previous scenario. The main differences will be in regards to the implementation time and the program feed. In this category, it is considered to have less station feed via STL than in the previous category.

6.3 Typical Low Power Transmitter Station

In this category, the level of redundancy is maintained. The main difference is located at the output of the transmitter. There is no patch panel included in the design. The assumption is there will be less frequent access to the input antenna system and/or dummy load in a low power station. Also, it is easier to manually transfer a low power transmitter to a dummy load than a high power. Therefore, no allocation for RF patch panel was deemed necessary.

A configuration of main/alternate transmitter is used in this category. Due to the level of power involved and lower transmitter price, a full transmitter redundancy was preferred with switching control.

A less expensive and versatile test equipment was selected. This test equipment is also used as demodulator for audio and video monitoring. The RF demodulator/Analyzer AUDEMAT model Golden Eagle is included in lower power site design.

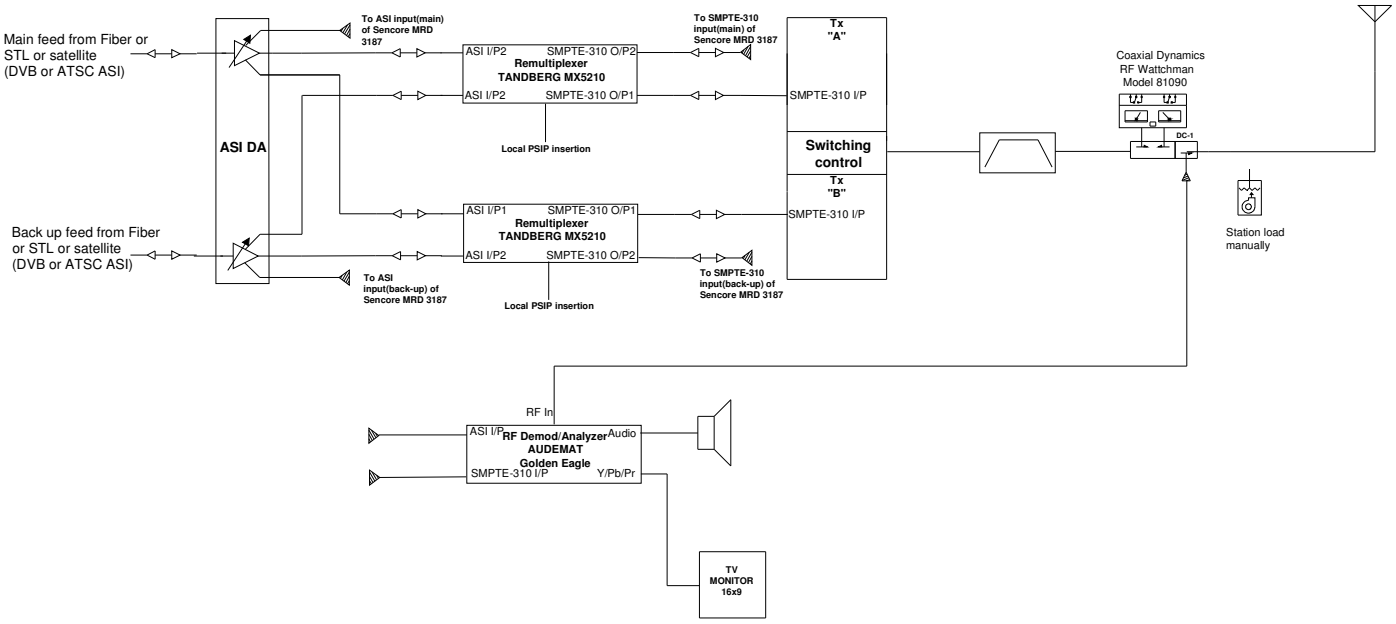


Figure 5 - Typical Schematic for Low Power station

7. DETAILED COST ESTIMATES

All budgetary estimates have a confidence level of ±25%. This level of confidence is referred to as the *reserve* in the summary page of each estimate. All budgetary quotes from the various suppliers and manufacturers can be found in annex C of document entitled ***Reference Data for DTV Costs analysis*** located on Spectrum Expert web site (www.spectrumexpert.ca).

It must be noted that all engineering design for the technical brief, project management and field strength coverage is included in the estimates.

There is no cost associated for upgrade, replacement, installation or repairs of the building, tower and antenna.

Finally, all taxes are extra.

7.1 Transmitter Category Serving a Population Greater than 300,000 People

In this category, two (2) groups of stations are identified: stations that remain on the same channel in DTV and stations changing channel in DTV. For stations above 1KW of transmitter power, provision for hardline, patch panel, elbows and coupling was budgeted. When a station is changing channel, a new transmission line, connectors and dehydrator was budgeted.

A provision for air balancing of the existing ventilation system due to removal of the NTSC transmitter is included in all estimates. For stations above 1KW in UHF and 1,5KW in VHF, a liquid cooled transmitter type was selected.

Test equipment is referred as optional for all stations in this category for general information. The item is present in the estimates but not added to the total cost of conversion The TV analyzer with ATSC module from Rohde & Schwarz model ETL including modules for MPEG and Transport Stream analyzer was selected. This is left at the discretion of the broadcaster.

This category covers all major transmitter sites in Canada. It is understood that at many sites, multiple stations are co-located in the same building. A higher provision for engineering and installation time was factored in due to complexity of the work when multiple broadcasters are involved. This may involve all levels of the project from obtaining a release to shut down the site, to accessing the tower to install new hardware. A simulcast of both analog and digital signal will increase the labour time.

In the summary table located in section 11, the overall cost for the conversion to DTV consider that four (4) sites out of five (5) are fed via STL. For individual cost per station, please refer to section 11,1.

7.2 Transmitter Category other than Scenario A

In this category, the stations were divided in two (2) groups: stations staying in the same band and stations with a channel changing band.

The first group involves stations moving from UHF to UHF, Low VHF to Low VHF and High VHF to High VHF.

It is assumed that the continuity of operation within the same antenna and transmission line must be possible. In this category, the stations were divided by transmitter power range. The following transmitter powers were selected:

<u>UHF Band:</u>

- 1-40 Watts
- 41-150 Watts
- 151-450 Watts

- 451W-1,1kW
- 1,1-2,1kW
- 2,1-4kW

VHF Band:

- 1-40 Watts
- 1-150 Watts
- 151-500 Watts
- 501W-1,1kW
- 1,1-2,3kW
- 2,3 – 3,7KW

A typical budgetary estimate was created for each transmitter power range and the stations were sorted based on their transmitter power.

For stations that will operate on a different channel in DTV, an allocation for a new transmission line, connectors and dehydrator was considered. A budgetary estimate was done for each site.

Again, no patch panel is budgeted for stations with transmitter power less than 1KW. Also, for site stations above 1KW of transmitter power, allocation for hardline, elbows and coupling was budgeted.

Again the ETL test equipment is referred as optional in the estimates for general information. It is no added to the total cost of conversion.

In the summary table, the overall cost for the conversion of this category to DTV consider that two (2) sites out of five (5) are fed via STL. For individual cost per station, please refer to section 11.

7.3 Typical Low Power Transmitter Sites

This scenario refers to stations that are not entitled to protection from interference from primary assignments. Those stations are low power transmitters. In VHF, our budgetary estimate is based on a transmitter power of 40 Watts. In UHF, our budgetary estimate is based on a 8 Watts but prices for transmitter power varying from 3 to 40 Watts are shown as reference. For a detailed description, refer to the quotation attached in annex C of the document *Reference Data for DTV Costs Analysis*.

For low power stations, in order to keep the cost of conversion as low as possible, the demodulator AUDEMAT Golden Eagle was selected. This equipment can also be used as basic test equipment that better fits the needs of low power stations.

No patch panel or hardline is included in the budgetary estimate.

For the low power stations, it was decided to proceed with a hard cut over. This means that the NTSC transmitter and monitoring equipment will be removed from their existing location and then the ATSC equipment will be installed. Due to the small dimension of LPTV buildings, it is preferable and less expensive to proceed this way. A disruption of service will occur. A small provision for electrical, mechanical and architectural work for the building is considered.

On the other hand, a higher allocation for installation and travel is considered in this category due to a greater distance of the LPTV sites from major centers. Specialized manpower may often not be available locally.

7.4 Typical installation of a Studio to Transmitter Link

The STL configuration will most likely be used for major center and where local programming is produced. This budgetary estimate is based on a fully redundant digital microwave link from the studio to the transmitter in the 6 to 7GHz band. The following schematic represents a typical STL:

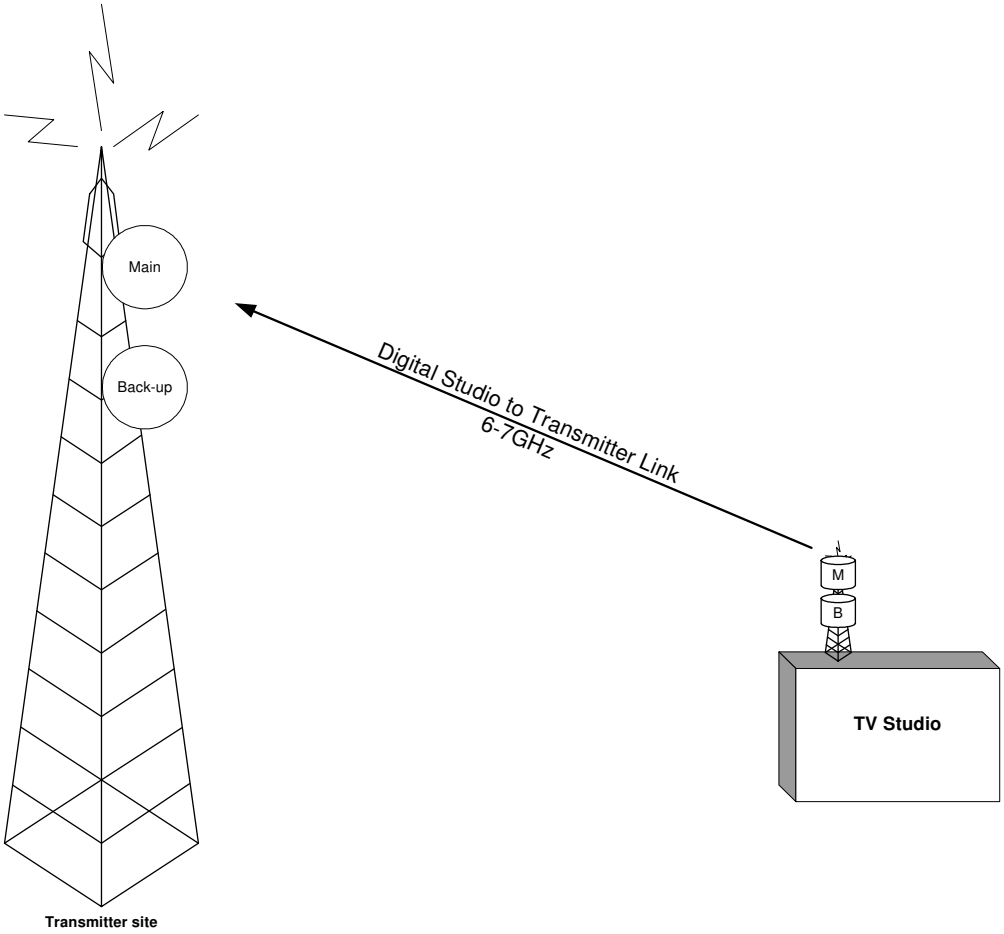


Figure 6 - Typical Schematic for STL

This STL can carry one (1) HD signal[11]. The budgetary estimate comprises two (2) 6-foot microwave dishes at the studio and two (2) 6-foot dishes at the transmitter site. It includes typical installation material for 300 feet of waveguide runs and installation accessories.

The estimate also considers redundant modems at each end with an ASI input up to 20Mbps. The following is the block schematic of the STL:

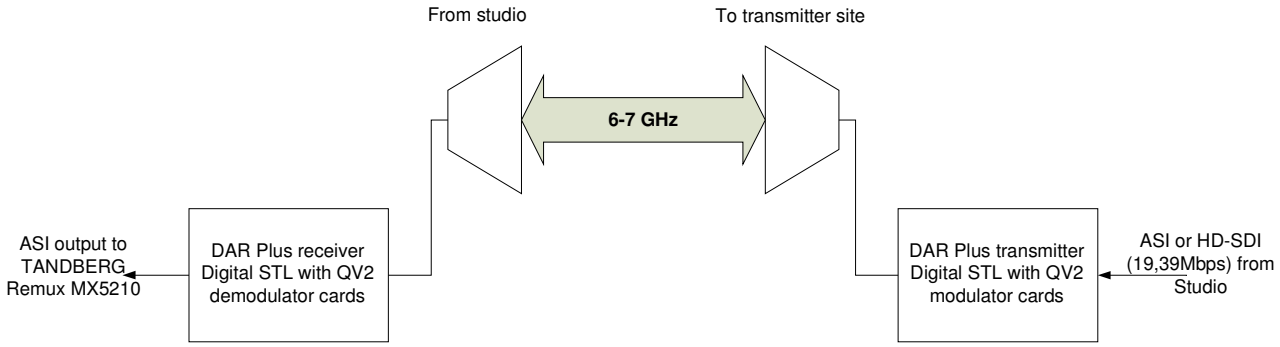


Figure 7 - Typical Block Schematic for STL Interconnection

Note that a Remultiplexer is required, and is already included in the budgetary estimated for the transmitter.

7.5 Typical Installation of a Satellite Antenna

This budgetary estimate is for the provision and installation of a 4.5-metre satellite dish. First of all, it is assumed to have line of sight to the satellite and available space for the location of the antenna exists. Following is a typical satellite installation:

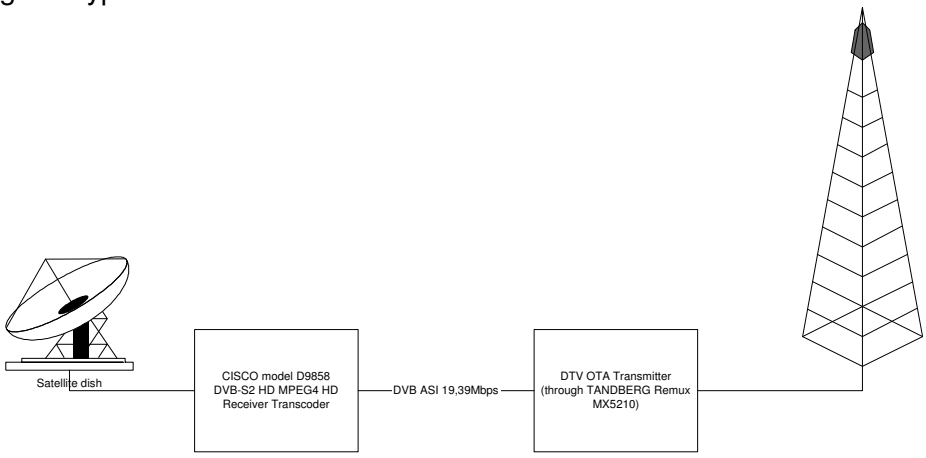


Figure 8 - Typical Block Schematic for a Satellite Installation

[11] A quote for a STL with more bit rate can be found in annex C of document Reference Data for DTV Costs analysis.

Included in the estimate is a 4.5-meter dish (C-band Receive Only from ASC or Andrew). This antenna is fixed on a tripod mount and fully equipped with a polarizer, anchor bolt and lightning rod kits, Interfacility Link (IFL) cable and two (2) Phase Lock Loop (PLL) LNB's.

This installation is based on an average price of a 4,5m C-band ASC satellite receive only dish. The installation costs are an average between Southern and Northern installation.

The technology used in the estimate is DVB-S2 and MPEG-2. The CISCO receiver model D9850 DVB-S2 MPEG 2 decoder was selected. The price for an MPEG-4 decoder is also provided and only the decoder needs to be added to the estimate. The CISCO Advanced Receiver model D9858 is equipped with a transcoder for conversion from MPEG-4 to MPEG-2.

Note that a remultiplexer is required and was included into the transmitter budgetary estimate.

7.6 Typical Installation of a Off-air Reception

In the event where a broadcaster elects to convert his station into a translator, he must be aware that the ATSC table at the translator will be identical as the main station. This may create confusion for the viewer (his receiver might not report the correct channel number). A typical installation is comprises an antenna, a band pass filter and a translator. The functionality of the translator is to receive the modulated 8-VSB signal on a specific channel, to transpose to Intermediate frequency (IF), then convert to the final broadcasting frequency and to provide the signal to the amplifier. This translation is entirely done on the modulated RF signal (no demodulation into bit-stream). The main advantage is that no exciter is required in the setup. See functional diagram below:

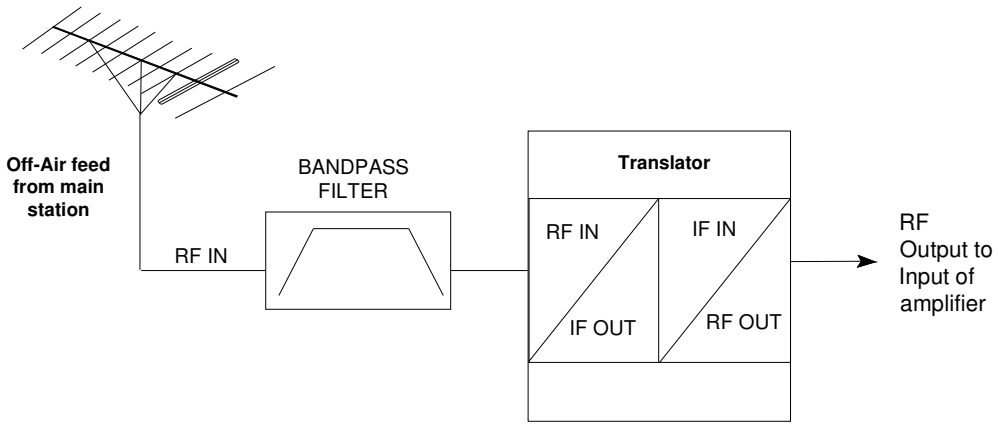


Figure 9 - Typical Block Schematic for a Translator

8. DTV TRANSMITTER RETROFIT

In this study, the conversion of NTSC transmitter to ATSC is not covered exhaustively. The Larcan transmitter manufacturer was approached through NOVANET and has provided budgetary costs for conversion of some of their transmitters. It must be noted that the retrofit for UHF and VHF transmitters must be considered on a case by case basis. The budgetary range is as follows:

- for a 1 KW analog to 350 W digital output transmitter = 35,000$
- for a 11 KW analog to 3.5 KW digital output transmitter = 70,000$

Other manufacturers may also offer retrofit possibilities of their transmitter to ATSC. This needs to be confirmed with each individual manufacturer.

9. DEPRECIATION OF EQUIPMENT

The following information was gathered from the annual reports of the three (3) major public broadcasters, with complementary information from one private broadcaster. No differentiation between DTV vs Analog equipment is made by the broadcasters. The following table highlights the depreciation figures used by these broadcasters.

	Public 1	Public 2	Public 3	Private 1
Buildings	33 years	Not Specified	30 years	Not Specified
Transmitters	20 years	20 years	17 years	20-25 Years
Antenna Tower	20 years	20 years (10 years for improvements)	Not Specified	20-25 years
Electrical Equipment	16 years	10 years	Not Specified	Not Specified
Transmitter Monitoring Equipment	10 years	10 years	7 years	5-7 Years
In House Technical Equipment	10 years	15 years	7 years	5-7 Years
Computer (Server)	5 years	5 years	5 years	Not Specified
Micro-Computer	3 years	5 years	5 years	Not Specified

Table 13 - Depreciation Figures

An outstanding question regarding the depreciation rate of the new DTV equipment still exists. How to calculate the depreciation rate of new DTV equipment that incorporates computer based control (such as exciters, monitoring equipment, etc). If this equipment falls into the computer category, then a depreciation rate of 5 to 10 years could be considered.

Again, this table is provided for information purposes only and could differ for broadcasters in the private sector.

10. ELECTRICAL COST COMPARISON

It is a well known fact that the transition to DTV should generally reduce the overall electrical consumption per km² of coverage. For the same power output, to achieve a better linearity for DTV operation, the power consumption of an ATSC transmitter is slightly higher. On the other hand, the required DTV power to achieve the same coverage is generally from 7 to 12 dB lower than the NTSC power.

Since each case has its own parameters and since each transmitter manufacturer has different power efficiencies, the following table highlights possible values that could be achieved for Study 1 only, when randomly selecting 3 different transmitter powers for each band (when considering same channel replacement):

Band	NTSC Parameters		Equivalent ATSC Parameters.		Reduction from Analog
	TX Power	Electrical Pw	TX Power	Electrical Pw	
Low-VHF	9600 W	20.5 kW	1740 W	10.7 kW	47%
Low-VHF	3500 W	7 kW	1208 W	7.1 kW	+1.42%
Low-VHF	9600 W	20.5 kW	650 W	3.56 kW	83%
High-VHF	1415 W	3.5 kW	287 W	1.53 kW	56%
High-VHF	20.2 kW	41 kW	2.4 kW	11.34 kW	72%
High-VHF	15.5 kW	31.7 kW	1.5 kW	14.17 kW	55%
UHF	925 W	4.6 kW	30 W	0.45 kW	90%
UHF	5400 W	23.4 kW	457 W	2.5 kW	91%
UHF	30 kW	36 kW (IOT)	2.8 kW	15.9 kW	56%
Average					61%

Table 14 - Electrical Consumption Comparison between NTSC and ATSC Transmitters (Study 1)

On the average, the conversion to digital television will result in a power consumption reduction of about 61%. For Study 2, since the reduction of about 7 dB in terms of ERP is generally balanced between the antenna gain and transmitter, the total required transmitter power will generally be reduced by 3-4 dB on the average. One could derive a new table using this value.

It should be noted though that for broadcasters that will be migrating from a VHF channel to a UHF channel, the full service duplication will only be achieved at the cost of a very high power UHF system (transmitter and antenna). The UHF ATSC transmitter required power will be approximately 30 kW (with a consumption of about 180 kW for solid state and 90 kW for IOT transmitters). The

equivalent low-VHF 30 kW transmitters will generally have a consumption of about 60 kW for solid state.

The following figure[12] provides additional information on DTV (ATSC) transmitter power output (TPO) vs electrical consumption:

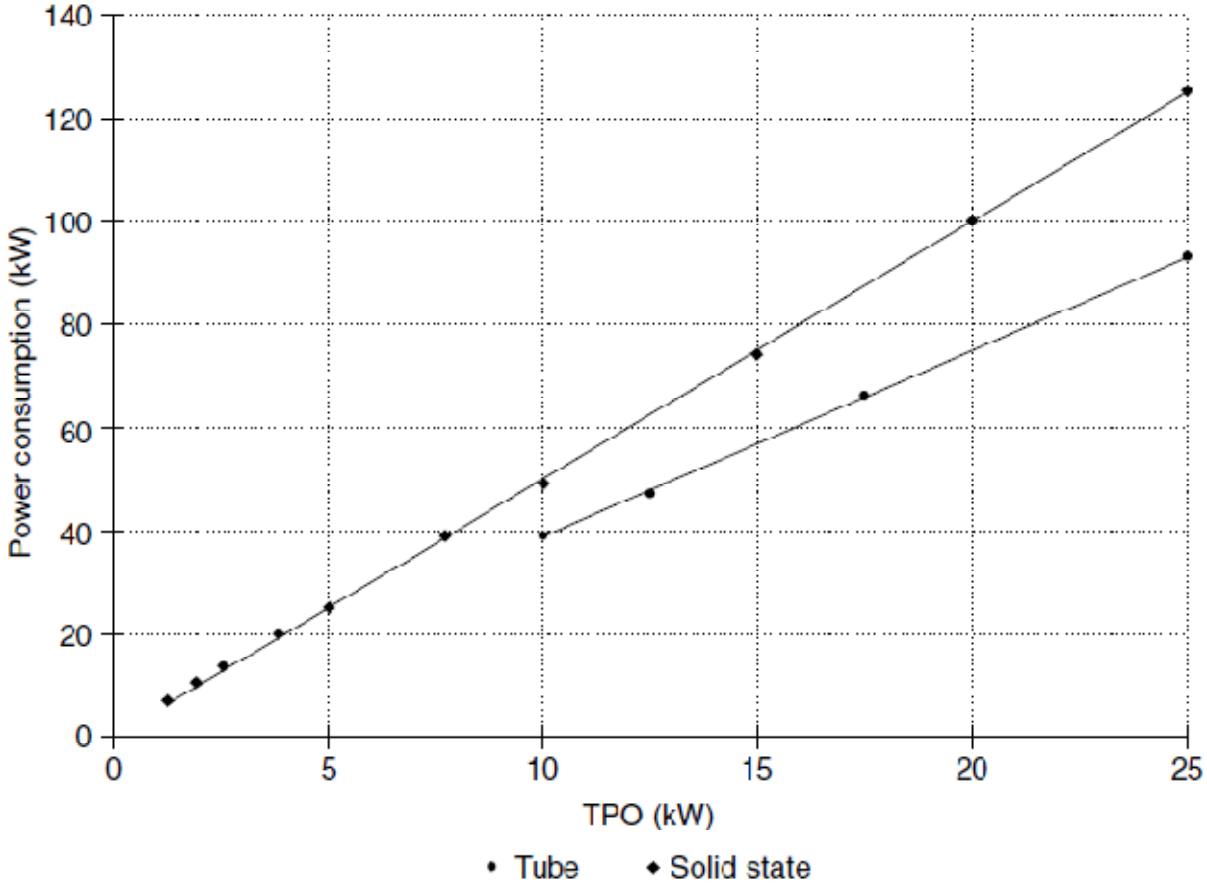


Figure 10 - DTV Transmitter TPO vs Electrical Power Consumption

[12] Collins, Gerald W. (2001) *Fundamentals of Digital Television*. USA : Wiley & Sons. ISBN 0-471-21376-4

11. COST SUMMARY TABLE

This cost summary table represents a total cost of conversion per study considering replacement of analog STL with new digital STL. Also, the LPTV cost is presented. The costs are broken down into the following station sub-categories:

Category			Number of stations	Study#1	Study#2	Study#3
A	Transmitter category serving populations greater than 300,000 people Note:4 sites out of 5 are feed STL[13]	Same Channel	46	$22,468,438	$19,438,416	$19,438,416
		New Channel	49	$71,484,668	$62,757,388	$62,757,388
B	Transmitter category other than section a) with local programming Note:2 sites out of 5 are feed STL[1]	Same Channel	210	$70,782,876	$56,780,733	$56,780,733
		New Channel	47	$91,341,933	$91,341,933	$14,969,852
C	Transmitter category other than section a) without local programming	Same Channel	315	$78,044,763	$57,041,549	$57,041,549
		New Channel	71	$130,717,239	$130,717,239	$16,159,116
Grand Total[14]			**738**	**$464,839,918**	**$418,077,260**	**$227,147,055**
Budgetary variations (±25%)				**$116,209,979**	**$104,519,315**	**$56,786,764**
		Number of stations		**Average cost per station[15]**		
D	Typical Low Power transmitter site operating on the same channel in DTV	1291 stations based on NTSC databases of January 2009	VHF	$189,690		
			UHF	$144,925		
E	Typical Low Power transmitter site operating on a different channel in DTV		VHF-UHF	$163,825		

Table 15 - Summary Cost for the DTV Conversion for Canada including STL's

[13] Cost for STL is $279,063. Refer to Annex B of document entitled 'Reference data for DTV cost analysis located on Spectrum Expert web site for the budgetary estimate.
[14] Cost for the provision of test equipment is not included in this price but is included as optional in the individual budgetary estimate provided in Annex D of document Reference Data for DTV Costs analysis. Test equipment might not be required for every single station, especially for network operators.
[15] Contingency of +25% not included in price but test equipment/demodulator is included.

11.1 Cost breakdown for Study 1 - Full or Ideal Service Replication

Qty 95 - Transmitter category serving population greater than 300,000 people					
Province	**City**	**Call sign**	**DTV channel**	**NTSC channel**	**Cost**
AB	Calgary	CBRT	9	9	$377,681
AB	Calgary	CIAN-TV	13	13	$719,306
AB	Calgary	CBRFT	16	16	$226, 606
AB	Calgary	CKCS-TV	27	32	$344,650
AB	Calgary	CFCN-TV	29	4	$4,280,000
AB	Calgary	CJCO-TV	38	38	$463,894
AB	Calgary	CICT-TV	41	2	$4,297,469
AB	Calgary	CHCA-TV-1	44	44	$327,056
AB	Calgary	CKAL-TV	49	5	$4,291,018
AB	Edmonton	CBXT	11	5	$1,371 825
AB	Edmonton	CITV-TV	13	13	$437,963
AB	Edmonton	CHCA-TV-2	17	17	$327,056
AB	Edmonton	CKES-TV	23	45	$386,763
AB	Edmonton	CJAL-TV	26	9	$799,981
AB	Edmonton	CBXFT	42	11	$3,206,900
AB	Edmonton	CJEO-TV	44	56	$909,419
AB	Edmonton	CFRN-TV	47	3	$4,302,306
AB	Edmonton	CKEM-TV	51	51	$596,268
BC	Vancouver	CHAN-TV	8	8	$226,606
BC	Vancouver	CKVU-TV	10	10	$236,106
BC	Vancouver	CIVI-TV-2	17	17	$327,056
BC	Vancouver	CHNM-TV	20	42	$398,578
BC	Vancouver	CBUFT	26	26	$244,606
BC	Vancouver	CIVT-TV	32	32	$327,056
BC	Vancouver	CBUT	43	2	$725,744
BC	Victoria	CHNU-TV-1	21	21	$226,606
BC	Victoria	CIVI-TV	40	53	$288,150
BC	Victoria	CHEK-TV	49	6	$730,056
MB	Winnipeg	CKY-TV	7	7	$442,338
MB	Winnipeg	CKND-TV	9	9	$442,338
MB	Winnipeg	CBWT	27	6	$4,327,838
MB	Winnipeg	CIIT-TV	35	35	$235,594
MB	Winnipeg	CBWFT	51	3	$3,226,194

Province	City	Call sign	DTV channel	NTSC channel	Cost
NS	Halifax	CBHFT	13	13	$255,183
NS	Halifax	CIHF-TV	26	8	$979,506
NS	Halifax	CBHT	39	3	$4,298,006
NS	Halifax	CJCH-TV	48	5	$4,294,513
ON	Hamilton	CHCH-TV	11	11	$356,433
ON	Hamilton	CKXT-TV-1	15	45	$293,513
ON	Hamilton	CITS-TV	36	36	$465,300
ON	Kitchener	CKCO-TV	13	13	$440,619
ON	Kitchener	CBLFT-8	17	61	$609,994
ON	Kitchener	CICO-TV-28	28	28	$438,028
ON	Kitchener	CBLN-TV-1	29	56	$905,019
ON	London	CBLFT-9	7	53	$449,039
ON	London	CFPL-TV	10	10	$440,619
ON	London	CICO-TV-18	18	18	$209,231
ON	London	CJMT-TV-1	20	20	$226,606
ON	London	CHCH-TV-2	24	51	$786,056
ON	London	CITS-TV-2	38	14	$292,244
ON	London	CFMT-TV-1	48	69	$889,034
ON	London	CBLN-TV-1	49	40	$1,295,725
ON	Oshawa	CHEX-TV-2	22	22	$226,606
ON	Ottawa	CIII-TV-6	6	6	$365,808
ON	Ottawa	CBOFT	9	9	$214,388
ON	Ottawa	CJOH-TV	13	13	$362,683
ON	Ottawa	CJMT-TV-2	17	14	$664,238
ON	Ottawa	CITY-TV-3	20	65	$665,294
ON	Ottawa	CHCH-TV-1	22	11	$3,205,894
ON	Ottawa	CICO-TV-24	24	24	$357,878
ON	Ottawa	CBOT	25	4	$3,205,369
ON	Ottawa	CFMT-TV-2	27	60	$1,205,344
ON	Ottawa	CITS-TV-1	42	32	$389,200
ON	Ottawa	CHRO-TV-43	43	43	$528,088
ON	Toronto	CFTO-TV	9	9	$209,231
ON	Toronto	CICA-TV	19	19	$528,088
ON	Toronto	CBLT	20	5	$687,575
ON	Toronto	CBLFT	25	25	$438,028
ON	Toronto	CKXT-TV	40	52	$267,594
ON	Toronto	CIII-TV-41	41	41	$528,088
ON	Toronto	CJMT-TV	44	69	$651,950
ON	Toronto	CFMT-TV	47	47	$569,550
ON	Toronto	CITY-TV	51	57	$599,656
ON	Windsor	CBET	9	9	$465,300
ON	Windsor	CHWI-TV-60	25	60	$288,975

Province	City	Call sign	DTV channel	NTSC channel	Cost
ON	Windsor	CICO-TV-32	32	32	$463,894
ON	Windsor	CBEFT	35	54	$429,034
QC	Hull	CIVO-TV	30	30	$463,894
QC	Hull	CFGS-TV	34	34	$357,878
QC	Hull	CHOT-TV	40	40	$411,415
QC	Montreal	CFTM-TV	10	10	$440,619
QC	Montreal	CFCF-TV	12	12	$440,619
QC	Montreal	CBFT	19	2	$4,266,294
QC	Montreal	CBMT	21	6	$3,191,581
QC	Montreal	CIVM-TV	26	17	$676,519
QC	Montreal	CFTU-TV	29	29	$226,606
QC	Montreal	CFJP-TV	35	35	$463,894
QC	Montreal	CJNT-TV	49	62	$273,881
QC	Montreal	CKMI-TV-1	51	46	$380,994
QC	Quebec	CBVT	12	11	$793,050
QC	Quebec	CIVQ-TV	15	15	$528,088
QC	Quebec	CKMI-TV	20	20	$209,231
QC	Quebec	CBVE-TV	25	5	$806,484
QC	Quebec	CFAP-TV	39	2	$4,286,719
QC	Quebec	CFCM-TV	49	4	$3,208,781
Transmitter category serving population less than 300,000 people					
Qty 85 -UHF STATIONS 1-40Watts		NOTE: including station operating on the same channel NTSC in DTV and stations moving from UHF to UHF.			
Province	City	Call sign	DTV channel	NTSC channel	Cost
AB	Bow Island	CJIL-TV-1	39	39	$208,638 each station.
AB	Grande Prairie	CBXFT-8	19	19	
AB	Grouard Mission	CFRN-TV-8	18	18	
AB	Lethbridge	CBXFT-3	23	23	
AB	Lethbridge	CJIL-TV	17	17	
AB	Medicine Hat	CBXFT-11	34	34	
AB	Red Deer	CBXFT-4	31	31	
AB	Burmis	CBRT-8	32	47	
AB	Burmis	CJIL-TV-2	51	55	
AB	Plamondon/Lac Labiche	CBXFT-9	21	22	
BC	Dawson Creek	CBUFT-5	33	33	
BC	Chilliwack	CBUFT-6	15	14	
BC	Enderby	CBUT-44	26	26	
BC	Enderby	CHBC-TV-5	16	16	

BC	Fernie	CBUBT-8	21	21	
BC	Kamloops	CBUFT-2	50	50	
BC	Kelowna	CBUFT-1	21	21	
BC	New Denver	CBUCT-6	17	17	
BC	Penticton	CBUT-40	17	17	
BC	Radium Hot Springs	CBUBT-5	17	17	
BC	Vernon	CBUT-41	18	18	
BC	Wilson Creek	CHAN-TV-6	23	23	
BC	Spillimacheen	CBUBT-6	39	69	
MB	Manigotagan	CBWGT-3	22	22	
NB	Fredericton	CBAFT-10	19	19	
NB	St-Stephen	CIHF-TV-12	21	21	
NS	Antigonish	CIHF-TV-15	21	21	
NS	Mulgrave	CIHF-TV-16	28	28	
NS	New Glasgow	CBHFT-7	15	15	
NS	Truro	CIHF-TV-4	18	18	
NS	Digby	CBHFT-6	17	58	
ON	Maynooth	CBOT-4	48	51	
ON	Barry's Bay	CBOT-2	19	19	
ON	Fort Frances	CBWFT-11	15	15	
ON	Hawkesbury	CHLF-TV-2	39	39	$208,638 each station
ON	Mcarthur's Mills	CBOT-5	33	33	
ON	Nipigon	CBLK-TV	16	16	
ON	Nipigon	CBLFT-19	26	26	
ON	Sarnia	CBLN-TV-2	34	34	
ON	Sault Ste Marie	CBLFT-20	26	26	
ON	Sault Ste Marie	CHCH-TV-5	38	38	
ON	Normandale	CBLN-TV-6	42	44	
ON	Wawa	CBLFT-23	16	16	
ON	North Bay	CHCH-TV-6	22	32	
ON	Barrie	CBLFT-11	42	55	
ON	Prescott	CKWS-TV-2	48	26	
ON	Brighton	CKWS-TV-1	30	66	
ON	Parry Sound	CICE-TV-11	31	42	
ON	Chatham	CBLN-TV-3	42	64	
ON	Smiths Falls	CKWS-TV-3	47	36	
ON	Temagami	CBCQ-TV-1	18	15	
ON	Mattawa	CBLFT-27	43	26	
QC	Lac-Etchemin	CBVT-4	22	55	
QC	Port-Daniel	CBVF-TV	19	16	
QC	Thetford-Mines	CBVT-9	23	21	
QC	Thetford-Mines	CBMT-4	42	32	

QC	Alma	CBJET-1	32	32	
QC	Baie-Comeau	CBMIT	28	28	
QC	Chandler	CBVB-TV	23	23	
QC	Chapeau	CIVP-TV	23	23	
QC	Escuminac	CBVA-TV	18	18	
QC	Gaspé	CBVG-TV	18	18	
QC	Gaspé	CIVK-TV-3	35	35	
QC	Ile du Havre Aubert	CBIMT-1	16	16	
QC	Maniwaki	CBVU-TV	15	15	
QC	Mont-Louis	CBGAT-10	19	19	
QC	Mont-St-Michel	CBFT-9	16	16	
QC	New-Richmond	CBVR-TV	27	27	
QC	Percé	CBVP-TV	14	14	
QC	Percé	CIVK-TV-2	40	40	
QC	Rimouski	CJPC-TV	18	18	$208,638 each station
QC	Rivière-St-Paul	CBST-16	21	21	
QC	St-Fulgence	CKTV-TV-1	27	27	
QC	Stoneham	CBVT-8	44	44	
QC	St-René-de-Matane	CBGAT-7	30	30	
QC	Ste-Famille	CBVT-2	43	55	
QC	Chicoutimi	CBJET	21	58	
SK	Bellegarde	CBKFT-9	26	26	
SK	Debden	CBKFT-3	22	22	
SK	Gravelbourg	CBKFT-6	39	39	
SK	Leoville	CBKFT-11	31	31	
SK	Moose Jaw	CBKFT-10	16	16	
SK	Ponteix	CBKFT-7	22	22	
SK	Willow Bunch	CBKFT-8	21	21	
SK	Zenon Park	CBKFT-5	21	21	
Qty 24 - UHF STATIONS 41-150Watts		NOTE: including station operating on the same channel NTSC in DTV and stations moving from UHF to UHF.			
AB	Forestburg	CBXT-12	35	52	
BC	Kelowna	CBUT-38	45	45	
MB	Brandon	CBWFT-10	21	21	
MB	Oak Lake	CBWFT-12	32	32	
NB	Miramichi City	CIHF-TV-13	40	40	
NS	Digby	CBHT-7	19	52	$229,763 each station
NS	New Glasgow	CIHF-TV-8	34	34	
NS	Yarmouth	CJCH-TV-7	40	40	
NS	Yarmouth	CIHF-TV-10	45	45	
NS	Truro	CBHT-8	42	55	
ON	Hawkesbury	CICO-TV-96	48	48	

ON	Fort Erie	CIII-TV-55	48	55	$229,763 each station
ON	Little Current	CBCE-TV	16	16	
ON	Manitouwage	CBLFT-25	15	15	
ON	Peterborough	CBLFT-12	42	44	
ON	Penetanguishene	CBLFT-15	34	34	
ON	Sault Ste Marie	CICO-TV-20	20	20	
ON	Sudbury	CHCH-TV-4	41	41	
ON	Sarnia-Oil Springs	CBLFT-17	17	68	
PE	Charlottetown	CIHF-TV-14	42	42	
QC	New-Carlisle	CBVN-TV	38	45	
QC	Sherbrooke	CBMT-3	50	50	
SK	Gravelbourg	CBKGT	45	45	
SK	North Battleford	CBKFT-12	41	41	
Qty 10 - UHF STATIONS 151-450Watts		NOTE: including station operating on the same channel NTSC in DTV and stations moving from UHF to UHF.			
BC	Fraser Valley	CHNU-TV	47	66	$312 213 each station
MB	Piney	CBWT-3	29	29	
NB	Woodstock	CIHF-TV-11	38	38	
ON	Foymount	CBOT-1	14	59	
ON	Chatham	CICO-TV-59	33	59	
ON	Pembroke	CHLF-TV-13	16	17	
ON	Cloyne	CICO-TV-92	44	55	
QC	Trois-Rivières	CBMT-1	28	28	
QC	Rivière-du-Loup	CFTF-TV	29	29	
QC	Carleton	CFTF-TV-11	44	44	
Qty 17 - UHF STATIONS 451W-1,1KW		NOTE: including station operating on the same channel NTSC in DTV and stations moving from UHF to UHF.			
AB	Red Deer	CBXT-13	22	22	$394,303 each station
NB	Moncton	CIHF-TV-3	27	27	
NS	Middleton	CBHFT-5	46	46	
NS	Wolfville	CIHF-TV-5	20	20	
ON	Penetanguishene	CICA-TV-51	29	51	
ON	Kingston	CBLFT-14	36	32	
ON	Pembroke	CICE-TV-16	28	29	
ON	Kenora	CICO-TV-91	44	44	
ON	Belleville	CICO-TV-53	26	53	
ON	Kingston	CICO-TV-38	38	38	
ON	Barrie	CBLT-TV-1	16	16	
PE	Charlottetown	CBAFT-5	32	31	
QC	Sherbrooke	CFKS-TV	41	30	
QC	Carleton	CIVK-TV	15	15	
QC	Sherbrooke	CIVS-TV	24	24	
QC	Val-d'Or	CFVS-TV	25	25	
QC	Rouyn-Noranda	CFVS-TV-1	20	20	

Qty 15- UHF STATIONS 1,1-2,1KW		NOTE: including station operating on the same channel NTSC in DTV and stations moving from UHF to UHF.			
ON	Wheatley	CHWI-TV	16	16	
ON	Mcarthur's Mills	CICO-TV-93	46	42	
ON	Belleville	CBLFT-13	15	15	
ON	Sudbury	CICO-TV-19	19	19	
ON	Sudbury	CHLF-TV-1	25	25	
ON	Sarnia-Oil Springs	CIII-TV-29	29	29	
ON	Peterborough	CICO-TV-74	18	18	
ON	Orillia	CFTO-TV-21	21	21	$446,550 each station
ON	Stevenson	CIII-TV-22	22	22	
ON	Sarnia	CKCO-TV-3	27	42	
ON	Muskoka	CHCH-TV-3	23	67	
ON	Wiarton	CBLN-TV-5	35	20	
QC	Grand-Fonds	CIVB-TV-1	31	31	
QC	Gascons	CIVK-TV-1	32	32	
QC	Trois-Rivières	CFKM-TV	34	16	
Qty 7- UHF STATIONS 2,1-4KW		NOTE: including station operating on the same channel NTSC in DTV and stations moving from UHF to UHF.			
ON	Peterborough	CFTO-TV-54	35	54	
ON	Pembroke	CJOH-TV-47	36	47	$550,800 each station
ON	Peterborough	CIII-TV-27	27	27	
ON	Woodstock	CITY-TV-2	31	31	
ON	Wingham	CBLN-TV-4	45	45	
QC	Rimouski	CIVB-TV	22	22	
QC	Trois-Rivières	CIVC-TV	46	45	
Qty 61 - VHF STATIONS 1-40Watts		NOTE: including station operating on the same channel NTSC in DTV and stations moving from L-VHF to L-VHF and H-VHF to H-VHF.			
AB	Jean D'Or	CBXAT-9	13	13	
BC	Bonnington Falls	CBUDT	13	13	
BC	Burns Lake	CH4333	7	7	
BC	Burns Lake	CKHS-TV	13	13	
BC	Chetwynd	CBCD-TV-2	7	7	
BC	Fernie	CBUBT-9	8	8	
BC	Fraser Lake	CFFL-TV-1	9	9	
BC	Golden	CBUBT-2	13	13	$218,964 each station
BC	Hazelton	CHHZ-TV	9	9	
BC	Houston	CFHO-TV	8	8	
BC	Nelson	CBUCT	9	9	
BC	Ootsa Lake	CH4467	5	5	
BC	Penticton	CHBC-TV-1	13	13	
BC	Purden Lake	CBUHT-1	10	10	
BC	Smithers	CBCY-TV-2	5	5	

BC	Smithers	CFHO-TV-1	13	13	
MB	Flin Flon	CKYF-TV	13	13	
MB	Grand Rapids	CBWHT	8	8	
MB	Pine Falls	CBWFT-6	11	11	
MB	The Pas	CBWFT-1	6	6	
MB	The Pas	CBWIT	7	7	
MB	The Pas	CKYP-TV	12	12	
MB	Thompson	CBWTT	7	7	
NF	Clarenville	CJCV-TV	11	11	
NF	Millertown	CBNAT-5	9	9	
NF	Sunnyside	CBNT-41	9	9	
NS	Aspen	CBHT-14	5	5	
NS	Dingwall	CBIT-16	12	12	
NT	Fort Providence	CBEBT-3	13	13	
NT	Hay River	CBEBT-1	7	7	
NT	Inuvik	CHAK-TV	6	6	
NT	Rae-Edzo	CFYK-TV-1	10	10	
NT	Yellowknife	CFYK-TV	8	8	
NT	Yellowknife	CHTY-TV	11	11	
NT	Yellowknife	CH4127	13	13	
ON	Dryden	CBWDT	9	9	
ON	Sioux Lookout	CBWDT-1	12	12	$218,964 each station
PE	Elmira	CBCT-2	11	11	
QC	Chandler	CHAU-TV-4	6	6	
QC	Fermont	CBFT-13	7	7	
QC	Fermont	CBMRT	9	9	
QC	Grande-Vallée	CBGAT-3	6	6	
QC	Havre-St-Pierre	CBST-1	12	12	
QC	La Tabatière	CBMLT	10	10	
QC	La Tuque	CBMET	9	9	
QC	L'Anse-à-Valleau	CHAU-TV-9	12	12	
QC	Longue-Pointe-de-Mingan	CBST-18	6	6	
QC	Matagami	CJDG-TV-4	9	9	
QC	Radisson	CFBJ-TV	10	10	
QC	Radisson	CJBJ-TV	13	13	
QC	Rivière-St-Paul	CBMPT	11	11	
QC	Schefferville	CBSET-1	7	7	
QC	Schefferville	CBFT-8	9	9	
QC	Waskaganish	CBFHT	9	9	
SK	Big River	CIPA-TV-2	7	7	
SK	Ile-A-La-Crosse	CBKCT	9	9	
SK	Palmbere Lake	CBKDT-1	8	8	
SK	Southend	CBKST-8	13	13	

SK	Uranium City	CBKAT	8	8	$218,964 each station
YT	Dawson	CBDDT	7	7	
YT	Watson Lake	CBDAT	8	8	
Qty 127 - VHF STATIONS 41-150Watts		NOTE: including station operating on the same channel NTSC in DTV and stations moving from L-VHF to L-VHF and H-VHF to H-VHF.			
AB	Burmis	CFCN-TV-4	5	5	$237,214 each station
AB	Chateh	CBXAT-7	5	5	
AB	High Level	CBXAT-4	8	8	
AB	Hinton	CBXT-3	8	8	
AB	Lac La Biche	CBXT-5	10	10	
AB	Peace River	CBXFT-5	9	9	
AB	Rocky Mountain House	CFRN-TV-10	12	12	
AB	Slave Lake	CBXAT-11	11	11	
AB	Whitecourt	CFRN-TV-3	12	12	
AB	Slave Lake	CFRN-TV-9	5	4	
BC	100 Mile House	CFJC-TV-6	5	5	
BC	Alert Bay	CBUT-16	11	11	
BC	Canal Flats	CBUBT-1	12	12	
BC	Clinton	CFJC-TV-4	9	9	
BC	Courtenay	CBUT-1	9	9	
BC	Cranbrook	CFCN-TV-9	5	5	
BC	Cranbrook	CBUBT-7	10	10	
BC	Fort Fraser	CBCB-TV-2	13	13	
BC	Fort Nelson	CBUGT	8	8	
BC	Fort St John	CBCD-TV-3	9	9	
BC	Oliver	CHBC-TV-3	8	8	
BC	Oliver	CBUT-42	6	6	
BC	Ootsa Lake	CHBL-TV	11	11	
BC	Ootsa Lake	CHHH-TV	10	10	
BC	Penticton	CHKL-TV-1	10	10	
BC	Salmon Arm	CHBC-TV-4	9	9	
BC	Sparwood	CBUBT-10	11	11	
BC	Terrace	CBUFT-3	11	11	
BC	Valemount	CBUHT-5	12	12	
BC	Vernon	CHBC-TV-2	7	7	
BC	Vernon	CHKL-TV-2	12	12	
BC	Whistler	CBUWT	13	13	
BC	Woss Camp	CBUT-13	12	12	
MB	Flin Flon	CBWBT	10	10	
MB	Jackhead	CBWGT-1	5	5	
MB	Leaf Rapids	CBWQT	13	13	
MB	Little Grand Rapids	CBWZT	9	9	
MB	Mccusker Lake	CBWUT	10	10	
MB	Melita	CKX-TV-2	9	9	
MB	Thompson	CKYT-TV	9	9	
NF	Carmanville	CBNAT-7	7	7	

NF	Clarenville	CBNT-10	7	7	
NF	Conche	CBNAT-8	12	12	
NF	Corner Brook	CJWN-TV	10	10	
NF	Deer Lake	CBYAT	12	12	
NF	Deer Lake	CJLW-TV	8	8	
NF	Goose Bay	CHTG-TV	12	12	
NF	Hampden	CBNAT-23	13	13	
NF	Labrador City	CBFT-12	11	11	
NF	Labrador City	CBNLT	13	13	
NF	Marystown	CJMA-TV	11	11	
NF	Portland Creek	CBYT-8	13	13	
NF	Ramea	CBNT-25	13	13	
NF	Red Rocks	CJRR-TV	11	11	
NF	Rose Blanche	CBYT-11	9	9	
NF	Springdale	CBNAT-13	13	13	
NF	St Alban's	CBNT-4	9	9	
NF	St Mary's	CBNT-6	10	10	
NF	St Vincent's	CBNT-26	7	7	
NS	Bridgewater	CIHF-TV-6	9	9	
NS	Cheticamp	CBHFT-4	10	10	
NS	Inverness	CBIT-19	8	8	
NS	Isle Madame	CIMC-TV	10	10	$237,214 each station
NS	Liverpool	CBHT-1	12	12	
NU	Cape Dorset	CBEJT	9	9	
ON	Chapleau	CITO-TV-4	8	9	
ON	Atikokan	CBWCT-1	7	7	
ON	Chapleau	CBCU-TV	7	7	
ON	Fort Albany	CBLDT	8	8	
ON	Geraldton	CBLFT-26	7	7	
ON	Gogama	CBLFT-21	12	12	
ON	Hearst	CBLFT-5	7	7	
ON	Kapuskasing	CITO-TV-1	10	10	
ON	Kenora	CJBN-TV	13	13	
ON	Kenora	CBWAT	8	8	
ON	Marathon	CBLAT-4	11	11	
ON	Red Lake	CBWET	10	10	
ON	Timmins	CHCH-TV-7	11	11	
ON	White River	CBLAT-2	12	12	
PE	St Edward	CBAFT-6	9	9	
PE	St Edward	CKCW-TV-2	5	5	
QC	Baie-Comeau	CBST-19	10	7	
QC	Aguanish	CBST-7	8	8	
QC	Baie-Comeau	CFTF-TV-5	9	9	
QC	Beauceville	CBVT-6	6	6	

QC	Blanc-Sablon	CBMST	5	5	
QC	Carleton	CHAU-TV	5	5	
QC	Chandler	CBGAT-15	8	8	
QC	Chapeau	CBOFT-1	11	11	
QC	Chibougamau	CBFAT	5	5	
QC	Cloridorme	CBGAT-16	8	8	
QC	Gaspé	CBGAT-17	9	9	
QC	Gaspé	CHAU-TV-6	7	7	
QC	Harrington-Harbour	CBST-11	8	8	
QC	Harrington-Harbour	CBMUT	13	13	
QC	Jonquière	CKTV-TV	12	12	
QC	Joutel	CJDG-TV-3	11	11	
QC	Lac-Mégantic	CBVT-3	12	12	
QC	Mont-Climont	CBGAT-1	13	13	
QC	Port-Daniel	CBGAT-21	7	7	
QC	Radisson	CBFRT	8	8	
QC	Rimouski	CFER-TV	11	11	
QC	Rivière-au-Renard	CHAU-TV-7	4	4	
QC	Sept-Îles	CFTF-TV-7	7	7	
QC	Sept-Îles	CBST	13	13	
QC	Sept-Îles	CFER-TV-2	5	5	$237,214 each station
QC	Sherbrooke	CKMI-TV-2	11	11	
QC	Sherbrooke	CKSH-TV	9	9	
QC	St-Fabien-de-Panet	CBVT-5	13	13	
QC	Temiscaming	CBFST-2	12	12	
SK	Beauval	CBKBT	7	7	
SK	Buffalo Narrows	CBKDT	11	11	
SK	Fond Du Lac	CBKAT-2	10	10	
SK	Hudson Bay	CICC-TV-3	11	11	
SK	Hudson Bay	CBKT-10	9	9	
SK	Island Falls	CBWBT-2	7	7	
SK	La Ronge	CBKST-2	12	12	
SK	Montreal Lake	CBKST-5	11	11	
SK	Nipawin	CBKST-15	10	10	
SK	Pelican Narrows	CBWBT-3	5	5	
SK	Riverhurst	CBKT-5	10	10	
SK	St Brieux	CBKFT-4	7	7	
SK	Stanley Mission	CBKST-4	8	8	
SK	Stony Rapids	CBKAT-3	7	7	
YT	Whitehorse	CBFT-15	7	7	
YT	Whitehorse	CHWT-TV	11	11	
Qty 91 - VHF STATIONS 151-500Watts		NOTE: including station operating on the same channel NTSC in DTV and stations moving from L-VHF to L-VHF and H-VHF to H-VHF.			
AB	Athabasca	CFRN-TV-12	13	13	$338,464 each station
AB	Athabasca	CBXT-1	8	8	
AB	Bonnyville	CKSA-TV-2	9	9	
AB	Etzikom	CBCA-TV-1	12	12	

AB	Fort Mcmurray	CBXT-6	9	9	
AB	Fort Mcmurray	CBXFT-6	12	12	
AB	Fort Vermilion	CBXAT-5	11	11	
AB	Grande Prairie	CFRN-TV-1	13	13	
AB	Lougheed	CFRN-TV-7	7	7	
AB	Manning	CBXAT-3	12	12	
AB	Medicine Hat	CFCN-TV-8	8	8	
AB	Peace River	CBXAT-1	7	7	
AB	Red Deer	CFRN-TV-6	8	8	
AB	Whitecourt	CBXT-2	7	9	
BC	Campbell River	CHEK-TV-5	13	13	
BC	Courtenay	CHAN-TV-4	11	11	
BC	Crawford Bay	CBUCT-1	5	5	
BC	Dawson Creek	CJDC-TV	5	5	
BC	Mcbride	CBUHT-3	6	6	
BC	Port Hardy	CBUT-19	6	6	
MB	Dauphin	CKYD-TV	12	12	
MB	Fairford	CBWGT-2	7	7	
MB	Fisher Branch	CBWGT	10	10	
MB	Gods Lake Narrow	CBWXT	13	13	
MB	Waasagomach	CBWWT	9	9	
MB	Dauphin	CBWST	9	8	$338,464 each station
NB	Bon Accord	CBAT-TV-1	6	6	
NB	Chatham	CBAT-TV-3	6	6	
NB	Edmundston	CBAFT-2	13	13	
NB	Edmundston	CIMT-TV-1	4	4	
NB	Moncton	CBAT-TV-2	7	7	
NB	Moncton	CBAFT	11	11	
NB	Saint John	CKLT-TV	9	9	
NB	Upsalquitch	CKAM-TV	12	12	
NF	Cow Head	CBYT-6	8	8	
NF	Goose Bay	CFLA-TV	8	8	
NF	Marystown	CBNT-3	5	5	
NF	Musgrave Harbour	CBNAT-11	9	9	
NF	Placentia	CBNT-2	12	12	
NF	Port Au Port	CBFNT	13	13	
NF	Roddickton	CBNAT-22	11	11	
NF	St Andrew's	CBYT-5	6	6	
NF	St Anthony	CBNAT-4	6	6	
NF	Stephenville	CBYT-1	8	8	
NF	Wesleyville	CBNT-9	5	5	
NS	Canning	CJCH-TV-1	10	10	
NS	Middleton	CBHT-6	8	8	
NS	Sheet Harbour	CBHT-4	11	11	

NS	Shelburne	CBHT-2	7	7	
NS	Sydney	CBHFT-3	13	13	
NS	Yarmouth	CBHT-3	11	11	
ON	Chapleau	CBLFT-22	13	13	
ON	Elliot Lake	CBEC-TV	7	7	
ON	Geraldton	CBLGT	13	13	
ON	Hearst	CBCC-TV	5	5	
ON	Kapuskasing	CBLFT-4	12	12	
ON	Manitouwage	CBLAT-1	8	8	
ON	Midland	CIII-TV-7	7	7	
ON	Sturgeon Falls	CBLFT-1	7	7	
ON	Sudbury	CBLFT-2	13	13	
ON	Thunder Bay	CBLFT-18	12	12	
ON	Timmins	CIII-TV-13	13	13	
PE	Charlottetown	CBCT	13	13	
QC	Forestville	CFTF-TV-4	4	4	
QC	Iles-de-la-Madeleine	CBIMT	12	12	
QC	Iles-de-la-Madeleine	CBMYT	7	7	
QC	Malartic	CBVD-TV	5	5	
QC	Matane	CBGAT	6	6	
QC	Mont-Tremblant	CBFT-1	11	11	
QC	Murdochville	CBGAT-2	10	10	$338,464 each station
QC	Percé	CHAU-TV-5	13	13	
QC	Percé	CBGAT-20	11	11	
QC	Rivière-au-Tonnerre	CBST-6	7	7	
QC	Rivière-du-Loup	CIMT-TV	9	9	
QC	Roberval	CJPM-TV-1	10	10	
QC	Sherbrooke	CHLT-TV	7	7	
QC	Ste-Marguerite-Marie	CHAU-TV-1	3	3	
QC	Trois-Rivières	CKTM-TV	13	13	
SK	Alticane	CIPA-TV-1	10	10	
SK	Fort Qu'Appelle	CKCK-TV-7	7	7	
SK	Greenwater Lake	CBKST-11	4	4	
SK	La Loche	CBKDT-2	13	13	
SK	Meadow Lake	CBCS-TV-1	8	8	
SK	Moose Jaw	CBKT-1	4	4	
SK	Nipawin	CKBQ-TV-1	12	12	
SK	Norquay	CICC-TV-2	7	7	
SK	Saskatoon	CFQC-TV	8	8	
SK	Stranraer	CBKST-1	9	9	
SK	Willow Bunch	CKCK-TV-2	6	6	
SK	Willow Bunch	CBKT-2	10	10	
SK	Wynyard	CBKT-8	6	6	

Qty 52 - VHF STATIONS 501W-1,1KW		NOTE: including station operating on the same channel NTSC in DTV and stations moving from L-VHF to L-VHF and H-VHF to H-VHF.			
AB	Ashmont	CFRN-TV-4	12	12	
AB	Bonnyville	CBXFT-1	6	6	
AB	Drumheller	CFCN-TV-1	12	12	
AB	Falher	CBXFT-2	6	6	
AB	Grande Prairie	CBXAT	10	10	
AB	Lloydminster	CITL-TV	4	4	
AB	Red Deer	CITV-TV-1	10	10	
BC	Prince George	CIFG-TV	12	12	
BC	Trail	CBUAT	11	11	
MB	Fisher Branch	CKYA-TV	8	8	
MB	Portage La Prairie	CHMI-TV	13	13	
NB	Campbellton	CBAFT-7	9	9	
NB	Saint John	CIHF-TV-2	12	12	
NF	Bonavista	CJWB-TV	10	10	
NF	Corner Brook	CBYT	5	5	
NF	Fox Harbour	CBNAT-10	7	7	
NF	Grand Falls	CBNAT	11	11	
NF	Mt St Margaret	CBNAT-9	9	9	
NF	Port Rexton	CBNT-1	13	13	
NF	St John's	CBNT	8	8	
NS	Antigonish	CJCB-TV-2	9	9	
NS	Caledonia	CJCH-TV-6	6	6	
NS	Inverness	CJCB-TV-1	6	6	
NS	Mulgrave	CBHFT-2	7	7	
ON	Dryden	CBWFT-9	6	6	
ON	Elliot Lake	CBLFT-6	12	12	
ON	Fort Frances	CBWCT	5	5	
ON	Huntsville	CICA-TV-13	13	13	
ON	Kearns	CITO-TV-2	11	11	
ON	Kingston	CKWS-TV	11	11	
ON	North Bay	CICA-TV-6	6	6	
ON	Paris	CIII-TV	6	6	
ON	Sudbury	CFGC-TV	11	11	
ON	Thunder Bay	CICO-TV-9	9	9	
ON	Timmins	CBLFT-3	9	9	
ON	Wawa	CHBX-TV-1	7	7	
ON	Wawa	CBLAT-3	9	9	
PE	Charlottetown	CKCW-TV-1	8	8	
QC	Rivière-du-Loup	CKRT-TV	7	7	
QC	Rouyn-Noranda	CIVA-TV-1	8	8	
QC	Rouyn-Noranda	CFEM-TV	13	13	

$396,088 each station

QC	Trois-Rivières	CHEM-TV	8	8	
SK	Carlyle Lake	CIEW-TV	7	7	
SK	Leoville	CBKST-3	12	12	
SK	Norquay	CBKT-9	13	13	
SK	Prince Albert	CIPA-TV	9	9	$396,088 each station
SK	Prince Albert	CBKST-9	5	5	
SK	Regina	CFRE-TV	11	11	
SK	Saskatoon	CBKST	11	11	
SK	Shaunavon	CBCP-TV-1	7	7	
SK	Swift Current	CBKT-4	5	5	
SK	Swift Current	CKMC-TV	12	12	
Qty 34- VHF STATIONS 1,1-2,3KW		NOTE: including station operating on the same channel NTSC in DTV and stations moving from L-VHF to L-VHF and H-VHF to H-VHF.			
AB	Coronation	CBXT-14	10	10	
AB	Lethbridge	CISA-TV	7	7	
AB	Lethbridge	CBRT-6	10	10	
AB	Lethbridge	CFCN-TV-5	13	13	
AB	Rosemary	CBRT-5	11	11	
BC	Courtenay	CKVU-TV-1	5	5	
MB	Foxwarren	CKX-TV-1	11	11	
NS	Mulgrave	CBHT-11	12	12	
NS	Sydney	CIHF-TV-7	11	11	
ON	Huntsville	CKNY-TV-11	11	11	
ON	North Bay	CKNY-TV	10	10	
ON	Owen Sound	CICA-TV-12	12	12	
ON	Peterborough	CHEX-TV	12	12	
ON	Sudbury	CBLT-6	9	9	
ON	Timmins	CBLT-7	6	6	$667,119 each station
QC	Baie-Trinité	CIVF-TV	12	12	
QC	Chicoutimi	CJPM-TV	6	6	
QC	Chicoutimi	CIVV-TV	8	8	
QC	Sept-Îles	CIVG-TV	9	9	
QC	Ste-Anne-des-Monts	CBGAT-11	8	8	
QC	Val-d'Or	CIVA-TV	12	12	
QC	Val-d'Or	CFEM-TV-1	10	10	
QC	Val-d'Or	CJDG-TV	7	7	
SK	Colgate	CKCK-TV-1	12	12	
SK	Golden Prairie	CKMC-TV-1	10	10	
SK	Moose Jaw	CKMJ-TV	7	7	
SK	North Battleford	CFQC-TV-2	6	6	
SK	North Battleford	CBKST-10	7	7	
SK	Regina	CBKT	9	9	
SK	Regina	CBKFT	13	13	

SK	Saskatoon	CBKFT-1	13	13	$667,119 each station
SK	Wynyard	CIWH-TV	12	12	
SK	Yorkton	CICC-TV	10	10	
SK	Yorkton	CBKT-6	5	5	
Qty 2- VHF STATIONS 2,3 – 3,7KW		NOTE: including station operating on the same channel NTSC in DTV and stations moving from L-VHF to L-VHF and H-VHF to H-VHF.			
BC	Trail	CKTN-TV	8	8	$701,963 each station
ON	Timmins	CICA-TV-7	7	7	
Qty 118- Different channel		NOTE: including stations moving from L-VHF to H-VHF, H-VHF to L-VHF, VHF to UHF and UHF to VHF .			
AB	Burmis	CISA-TV-1	9	3	$386,476
AB	Coutts/Milkriver	CBRT-16	9	4	$490,164
AB	High Prairie	CBXAT-2	39	2	$4,249,038
AB	Hinton	CBXFT-7	13	3	$487,076
AB	Lac La Biche	CFRN-TV-5	7	2	$561,288
AB	Lethbridge	CKAL-TV-1	46	2	$4,270,000
AB	Lloydminster	CKSA-TV	13	2	$1,089,125
AB	Medicine Hat	CHAT-TV	36	6	$4,268,994
AB	Peace River	CFRN-TV-2	15	3	$4,250,919
AB	Pivot	CHAT-TV-1	13	4	$852,975
AB	Red Deer	CHCA-TV	28	6	$4,262,744
AB	Red Deer	CKEM-TV-1	45	4	$4,257,638
BC	100 Mile House	CITM-TV	7	3	$488,214
BC	Burns Lake	CBCY-TV-1	32	4	$3,157,256
BC	Chilliwack	CBUT-2	7	3	$1,042,869
BC	Creston	CBUCT-2	7	3	$488,620
BC	Houston	CBCY-TV	22	2	$1,170,431
BC	Kamloops	CHKM-TV	11	6	$1,075,881
BC	Kamloops	CFJC-TV	13	4	$1,075,881
BC	Kelowna	CHBC-TV	8	2	$487,158
BC	Kelowna	CHKL-TV	24	5	$854,081
BC	Nelson	CKTN-TV-3	7	3	$387,208
BC	Oliver/Osoyoos	CKKM-TV	12	3	$487,645
BC	Pemberton	CBUPT	7	4	$842,656
BC	Prince George	CBUFT-4	14	4	$295,169
BC	Prince George	CKPG-TV	34	2	$3,160,756
BC	Prince Rupert	CFTK-TV-1	7	6	$488,783
BC	Salmon Arm	CBUT-43	33	3	$615,238
BC	Terrace	CFTK-TV	35	3	$708,975
MB	Brandon	CKX-TV	49	5	$1,286,238
MB	Brandon	CKYB-TV	50	4	$1,294,263
MB	Flin Flon	CBWFT-2	8	3	$322,720
MB	Lac Du Bonnet	CBWT-2	21	4	$4,254,413
MB	Mafeking	CBWYT	10	2	$1,238,438
MB	Mccreary	CKX-TV-3	19	11	$3,155,156
MB	Minnedosa	CKND-TV-2	44	2	$3,215,356

MB	Ste Rose Du Lac	CBWFT-4	14	3	$859,321
MB	Thompson	CBWFT-5	11	5	$487,888
NB	Allardville	CBAFT-3	36	3	$4,261,400
NB	Campbellton	CKCD-TV	21	7	$3,169,756
NB	Campbellton	CBAT-TV-4	34	4	$854,878
NB	Florenceville	CKLT-TV-1	24	3	$3,161,156
NB	Fredericton	CBAFT-1	31	5	$3,184,000
NB	Fredericton	CIHF-TV-1	44	11	$3,184,000
NB	Moncton	CKCW-TV	29	2	$3,168,106
NB	Saint John	CBAT-TV	42	4	$933,988
NF	Argentia	CJOM-TV	45	3	$3,174,325
NF	Baie Verte	CBNAT-1	22	3	$3,179,163
NF	Bonne Bay	CBYT-3	50	2	$3,168,413
NF	Grand Bank	CJOX-TV-1	43	2	$3,168,413
NF	Grand Falls	CJCN-TV	44	4	$3,179,431
NF	Hawke's Bay	CBYT-9	24	4	$610,281
NF	Hermitage	CBNT-24	24	4	$3,157,394
NF	Port Aux Basques	CBYT-4	25	3	$769,596
NF	St John's	CBFJ-TV	17	4	$402,478
NF	St John's	CJON-TV	42	6	$3,176,475
NF	Stephenville	CJSV-TV	14	4	$3,163,838
NF	Trepassey	CBNT-39	17	4	$572,438
NS	Caledonia	CBHT-9	30	2	$277,069
NS	Cheticamp	CBIT-2	50	2	$3,164,381
NS	New Glasgow	CBHT-5	47	4	$3,170,563
NS	Port Hawkesbury	CJCB-TV-6	41	3	$3,170,563
NS	Sheet Harbour	CJCH-TV-5	44	2	$618,319
NS	Shelburne	CIHF-TV-9	28	10	$503,406
NS	Sydney	CJCB-TV	14	4	$3,170,563
NS	Sydney	CBIT	36	5	$3,179,969
NS	Yarmouth	CBHFT-1	50	3	$4,260,594
ON	Bancroft	CIII-TV-2	8	2	$864,025
ON	Barrie	CKVR-TV	10	3	$993,800
ON	Chatham	CBLFT-10	12	48	$480,925
ON	Cornwall	CJOH-TV-8	45	8	$4,274,569
ON	Deseronto	CJOH-TV-6	49	6	$4,265,969
ON	Elliot Lake	CICI-TV-1	30	3	$4,241,513
ON	Hearst	CITO-TV-3	42	4	$4,258,981
ON	Huntsville	CBLT-TV-2	45	8	$4,265,163
ON	Kapuskasing	CBLT-9	17	2	$4,255,756
ON	Kearns	CBLT-8	28	2	$4,254,950
ON	Kenora	CBWFT-7	50	2	$4,249,038
ON	North Bay	CFGC-TV-2	32	2	$4,252,531
ON	North Bay	CBLT-4	38	4	$4,264,894
ON	Owen Sound	CIII-TV-4	26	4	$4,264,963
ON	Pembroke	CBOT-6	39	3	$4,271,075

ON	Pembroke	CHRO-TV	51	5	$4,266,506
ON	Sault Ste Marie	CHBX-TV	13	2	$1,080,356
ON	Sault Ste Marie	CBLT-5	21	5	$4,260,325
ON	Sudbury	CICI-TV	8	5	$962,931
ON	Thunder Bay	CHFD-TV	46	4	$3,215,356
ON	Thunder Bay	CKPR-TV	49	2	$3,184,031
ON	Timmins	CITO-TV	48	3	$4,260,862
ON	Wiarton	CKCO-TV-2	17	2	$4,281,288
ON	Wingham	CKNX-TV	33	8	$4,273,225
PE	St Edward	CBCT-1	26	4	$503,681
QC	Bearn/Fabre	CKRN-TV-3	7	3	$1,347,089
QC	Blanc-Sablon	CBST-17	8	3	$462,031
QC	Carleton	CBGAT-14	47	2	$1,170,706
QC	Chibougamau	CBMCT	8	4	$459,513
QC	Cloridorme	CHAU-TV-8	16	11	$328,600
QC	Jonquière	CFRS-TV	13	4	$785,888
QC	La Tabatière	CBST-13	7	4	$487,645
QC	La Tuque	CBFT-14	11	3	$1,084,119
QC	Mont-Laurier	CBFT-2	44	3	$4,254,950
QC	Radisson	CH2440	7	6	$313,726
QC	Rapides-des-Joachims	CBOFT-2	31	8	$340,784
QC	Rimouski	CJBR-TV	45	2	$3,155,856
QC	Rivière-au-Renard	CBGAT-22	25	2	$4,231,031
QC	Rouyn-Noranda	CKRN-TV	9	4	$956,106
QC	Sept-Îles	CBSET	11	3	$982,500
QC	St-Michel-des-Saints	CBFT-3	31	7	$4,255,756
QC	St-Pamphile	CBSPT	27	3	$338,753
SK	Cypress Hills	CBCP-TV-2	27	2	$4,262,006
SK	Melfort	CKBQ-TV	36	2	$4,259,788
SK	Ponteix	CBCP-TV-3	8	3	$1,174,188
SK	Prince Albert	CBKFT-2	46	3	$4,256,563
SK	Regina	CKCK-TV	8	2	$1,270,938
SK	Saskatoon	CFSK-TV	42	4	$4,240,169
SK	Spiritwood	CBKST-13	38	2	$3,165,956
SK	Stranraer	CFQC-TV-1	51	3	$4,268,994
SK	Warmley	CBKT-7	46	3	$3,205,206

11.2 Cost breakdown for Study 2 - Limited Service Replication

Qty 95 - Transmitter category serving population greater than 300,000 people					
Province	**City**	**Call sign**	**DTV channel**	**NTSC channel**	**Cost**
AB	Calgary	CBRT	9	9	$377,681
AB	Calgary	CIAN-TV	13	13	$377,681
AB	Calgary	CBRFT	16	16	$210,606
AB	Calgary	CKCS-TV	27	32	$293,188
AB	Calgary	CFCN-TV	29	4	$4,280,000
AB	Calgary	CJCO-TV	38	38	$310,181
AB	Calgary	CICT-TV	41	2	$4,297,469
AB	Calgary	CHCA-TV-1	44	44	$235,594
AB	Calgary	CKAL-TV	49	5	$4,291,019
AB	Edmonton	CBXT	11	5	$1,371,825
AB	Edmonton	CITV-TV	13	13	$437,962
AB	Edmonton	CHCA-TV-2	17	17	$235,594
AB	Edmonton	CKES-TV	23	45	$295,300
AB	Edmonton	CJAL-TV	26	9	$479,171
AB	Edmonton	CBXFT	42	11	$895,188
AB	Edmonton	CJEO-TV	44	56	$540,269
AB	Edmonton	CFRN-TV	47	3	$4,302,306
AB	Edmonton	CKEM-TV	51	51	$439,771
BC	Vancouver	CHAN-TV	8	8	$226,606
BC	Vancouver	CKVU-TV	10	10	$236,106
BC	Vancouver	CIVI-TV-2	17	17	$226,606
BC	Vancouver	CHNM-TV	20	42	$283,975
BC	Vancouver	CBUFT	26	26	$226,606
BC	Vancouver	CIVT-TV	32	32	$327,056
BC	Vancouver	CBUT	43	2	$354,544
BC	Victoria	CHNU-TV-1	21	21	$203,606
BC	Victoria	CIVI-TV	40	53	$270,650
BC	Victoria	CHEK-TV	49	6	$730,056
MB	Winnipeg	CKY-TV	7	7	$442,338
MB	Winnipeg	CKND-TV	9	9	$442,338
MB	Winnipeg	CBWT	27	6	$4,327,838
MB	Winnipeg	CIIT-TV	35	35	$210,594
MB	Winnipeg	CBWFT	51	3	$1,220,269

Province	City	Call sign	DTV channel	NTSC channel	Cost
NS	Halifax	CBHFT	13	13	$226,606
NS	Halifax	CIHF-TV	26	8	$527,800
NS	Halifax	CBHT	39	3	$4,298,006
NS	Halifax	CJCH-TV	48	5	$4,294,513
ON	Hamilton	CHCH-TV	11	11	$356,433
ON	Hamilton	CKXT-TV-1	15	45	$276,013
ON	Hamilton	CITS-TV	36	36	$280,713
ON	Kitchener	CKCO-TV	13	13	$440,619
ON	Kitchener	CBLFT-8	17	61	$440,809
ON	Kitchener	CICO-TV-28	28	28	$280,713
ON	Kitchener	CBLN-TV-1	29	56	$675,763
ON	London	CBLFT-9	7	53	$337,463
ON	London	CFPL-TV	10	10	$440,619
ON	London	CICO-TV-18	18	18	$226,606
ON	London	CJMT-TV-1	20	20	$210,606
ON	London	CHCH-TV-2	24	51	$680,788
ON	London	CITS-TV-2	38	14	$276,244
ON	London	CFMT-TV-1	48	69	$647,115
ON	London	CBLN-TV-1	49	40	$677,981
ON	Oshawa	CHEX-TV-2	22	22	$210,606
ON	Ottawa	CIII-TV-6	6	6	$365,808
ON	Ottawa	CBOFT	9	9	$214,388
ON	Ottawa	CJOH-TV	13	13	$362,683
ON	Ottawa	CJMT-TV-2	17	14	$425,571
ON	Ottawa	CITY-TV-3	20	65	$483,796
ON	Ottawa	CHCH-TV-1	22	11	$1,204,319
ON	Ottawa	CICO-TV-24	24	24	$243,675
ON	Ottawa	CBOT	25	4	$3,205,369
ON	Ottawa	CFMT-TV-2	27	60	$649,309
ON	Ottawa	CITS-TV-1	42	32	$297,738
ON	Ottawa	CHRO-TV-43	43	43	$280,713
ON	Toronto	CFTO-TV	9	9	$209,231
ON	Toronto	CICA-TV	19	19	$280,713
ON	Toronto	CBLT	20	5	$687,575
ON	Toronto	CBLFT	25	25	$280,713
ON	Toronto	CKXT-TV	40	52	$278,025
ON	Toronto	CIII-TV-41	41	41	$280,713
ON	Toronto	CJMT-TV	44	69	$473,421
ON	Toronto	CFMT-TV	47	47	$352,028
ON	Toronto	CITY-TV	51	57	$473,421
ON	Windsor	CBET	9	9	$377,681
ON	Windsor	CHWI-TV-60	25	60	$271,463

Province	City	Call sign	DTV channel	NTSC channel	Cost
ON	Windsor	CICO-TV-32	32	32	$280,713
ON	Windsor	CBEFT	35	54	$374,219
QC	Hull	CIVO-TV	30	30	$280,713
QC	Hull	CFGS-TV	34	34	$272,106
QC	Hull	CHOT-TV	40	40	$243,675
QC	Montreal	CFTM-TV	10	10	$440,619
QC	Montreal	CFCF-TV	12	12	$440,619
QC	Montreal	CBFT	19	2	$4,266,294
QC	Montreal	CBMT	21	6	$3,191,581
QC	Montreal	CIVM-TV	26	17	$522,438
QC	Montreal	CFTU-TV	29	29	$210,606
QC	Montreal	CFJP-TV	35	35	$280,713
QC	Montreal	CJNT-TV	49	62	$273,881
QC	Montreal	CKMI-TV-1	51	46	$280,544
QC	Quebec	CBVT	12	11	$793,050
QC	Quebec	CIVQ-TV	15	15	$280,713
QC	Quebec	CKMI-TV	20	20	$209,231
QC	Quebec	CBVE-TV	25	5	$494,390
QC	Quebec	CFAP-TV	39	2	$4,286,719
QC	Quebec	CFCM-TV	49	4	$3,208,781
Transmitter category serving population less than 300,000 people					
Qty 80 -UHF STATIONS 1-40Watts		**NOTE: including station operating on the same channel NTSC in DTV and stations moving from UHF to UHF.**			
Province	**City**	**Call sign**	**DTV channel**	**NTSC channel**	**Cost**
AB	Bow Island	CJIL-TV-1	39	39	$208,638 each station
AB	Grande Prairie	CBXFT-8	19	19	
AB	Grouard Mission	CFRN-TV-8	18	18	
AB	Lethbridge	CBXFT-3	23	23	
AB	Lethbridge	CJIL-TV	17	17	
AB	Medicine Hat	CBXFT-11	34	34	
AB	Red Deer	CBXFT-4	31	31	
BC	Dawson Creek	CBUFT-5	33	33	
BC	Enderby	CBUT-44	26	26	
BC	Enderby	CHBC-TV-5	16	16	
BC	Fernie	CBUBT-8	21	21	
BC	Kamloops	CBUFT-2	50	50	
BC	Kelowna	CBUFT-1	21	21	
BC	Kelowna	CBUT-38	45	45	

BC	New Denver	CBUCT-6	17	17	
BC	Penticton	CBUT-40	17	17	
BC	Radium Hot Springs	CBUBT-5	17	17	
BC	Vernon	CBUT-41	18	18	
BC	Wilson Creek	CHAN-TV-6	23	23	
MB	Brandon	CBWFT-10	21	21	
MB	Manigotagan	CBWGT-3	22	22	
MB	Oak Lake	CBWFT-12	32	32	
NB	Fredericton	CBAFT-10	19	19	
NB	Miramichi City	CIHF-TV-13	40	40	
NB	St-Stephen	CIHF-TV-12	21	21	
NS	Antigonish	CIHF-TV-15	21	21	
NS	Mulgrave	CIHF-TV-16	28	28	
NS	New Glasgow	CBHFT-7	15	15	
NS	New Glasgow	CIHF-TV-8	34	34	
NS	Truro	CIHF-TV-4	18	18	
NS	Yarmouth	CJCH-TV-7	40	40	
NS	Yarmouth	CIHF-TV-10	45	45	
ON	Barry's Bay	CBOT-2	19	19	
ON	Fort Frances	CBWFT-11	15	15	
ON	Hawkesbury	CHLF-TV-2	39	39	$208,638 each station
ON	Hawkesbury	CICO-TV-96	48	48	
ON	Little Current	CBCE-TV	16	16	
ON	Manitouwage	CBLFT-25	15	15	
ON	Mcarthur's Mills	CBOT-5	33	33	
ON	Nipigon	CBLK-TV	16	16	
ON	Nipigon	CBLFT-19	26	26	
ON	Penetanguishene	CBLFT-15	34	34	
ON	Sarnia	CBLN-TV-2	34	34	
ON	Sault Ste Marie	CBLFT-20	26	26	
ON	Sault Ste Marie	CHCH-TV-5	38	38	
ON	Sault Ste Marie	CICO-TV-20	20	20	
ON	Sudbury	CHCH-TV-4	41	41	
ON	Wawa	CBLFT-23	16	16	
PE	Charlottetown	CIHF-TV-14	42	42	
QC	Alma	CBJET-1	32	32	
QC	Baie-Comeau	CBMIT	28	28	
QC	Chandler	CBVB-TV	23	23	
QC	Chapeau	CIVP-TV	23	23	
QC	Escuminac	CBVA-TV	18	18	
QC	Gaspé	CBVG-TV	18	18	
QC	Gaspé	CIVK-TV-3	35	35	

QC	Ile du Havre Aubert	CBIMT-1	16	16	
QC	Maniwaki	CBVU-TV	15	15	
QC	Mont-Louis	CBGAT-10	19	19	
QC	Mont-St-Michel	CBFT-9	16	16	
QC	New-Richmond	CBVR-TV	27	27	
QC	Percé	CBVP-TV	14	14	
QC	Percé	CIVK-TV-2	40	40	
QC	Rimouski	CJPC-TV	18	18	
QC	Rivière-St-Paul	CBST-16	21	21	
QC	Sherbrooke	CBMT-3	50	50	
QC	St-Fulgence	CKTV-TV-1	27	27	
QC	Stoneham	CBVT-8	44	44	$208,638 each station
QC	St-René-de-Matane	CBGAT-7	30	30	
QC	Trois-Rivières	CBMT-1	28	28	
SK	Bellegarde	CBKFT-9	26	26	
SK	Debden	CBKFT-3	22	22	
SK	Gravelbourg	CBKFT-6	39	39	
SK	Gravelbourg	CBKGT	45	45	
SK	Leoville	CBKFT-11	31	31	
SK	Moose Jaw	CBKFT-10	16	16	
SK	North Battleford	CBKFT-12	41	41	
SK	Ponteix	CBKFT-7	22	22	
SK	Willow Bunch	CBKFT-8	21	21	
SK	Zenon Park	CBKFT-5	21	21	
Qty 9 - UHF STATIONS 41-150Watts		NOTE: including station operating on the same channel NTSC in DTV and stations moving from UHF to UHF.			
MB	Piney	CBWT-3	29	29	
NB	Moncton	CIHF-TV-3	27	27	
NB	Woodstock	CIHF-TV-11	38	38	
ON	Kenora	CICO-TV-91	44	44	$229 763 each station
ON	Kingston	CICO-TV-38	38	38	
QC	Carleton	CFTF-TV-11	44	44	
QC	Carleton	CIVK-TV	15	15	
QC	Rivière-du-Loup	CFTF-TV	29	29	
QC	Sherbrooke	CIVS-TV	24	24	

Qty 16 - UHF STATIONS 151-450Watts		NOTE: including station operating on the same channel NTSC in DTV and stations moving from UHF to UHF.			
AB	Red Deer	CBXT-13	22	22	
NS	Middleton	CBHFT-5	46	46	
NS	Wolfville	CIHF-TV-5	20	20	
ON	Barrie	CBLT-TV-1	16	16	
ON	Belleville	CBLFT-13	15	15	
ON	Orillia	CFTO-TV-21	21	21	
ON	Peterborough	CICO-TV-74	18	18	
ON	Sarnia-Oil Springs	CIII-TV-29	29	29	$312 213 each station
ON	Stevenson	CIII-TV-22	22	22	
ON	Sudbury	CICO-TV-19	19	19	
ON	Sudbury	CHLF-TV-1	25	25	
ON	Wheatley	CHWI-TV	16	16	
QC	Gascons	CIVK-TV-1	32	32	
QC	Grand-Fonds	CIVB-TV-1	31	31	
QC	Rouyn-Noranda	CFVS-TV-1	20	20	
QC	Val-d'Or	CFVS-TV	25	25	
Qty 4 - UHF STATIONS 451W-1,1KW		NOTE: including station operating on the same channel NTSC in DTV and stations moving from UHF to UHF.			
ON	Peterborough	CIII-TV-27	27	27	
ON	Wingham	CBLN-TV-4	45	45	$394 303 each station
ON	Woodstock	CITY-TV-2	31	31	
QC	Rimouski	CIVB-TV	22	22	
Qty 179 - VHF STATIONS 1-40Watts		NOTE: including station operating on the same channel NTSC in DTV and stations moving from L-VHF to L-VHF and H-VHF to H-VHF.			
AB	Burmis	CFCN-TV-4	5	5	
AB	Chateh	CBXAT-7	5	5	
AB	Fort Vermilion	CBXAT-5	11	11	
AB	High Level	CBXAT-4	8	8	
AB	Hinton	CBXT-3	8	8	
AB	Jean D'Or	CBXAT-9	13	13	
AB	Lac La Biche	CBXT-5	10	10	$218 964 each station
AB	Peace River	CBXFT-5	9	9	
AB	Rocky Mountain House	CFRN-TV-10	12	12	
AB	Slave Lake	CBXAT-11	11	11	
AB	Whitecourt	CFRN-TV-3	12	12	
BC	100 Mile House	CFJC-TV-6	5	5	
BC	Alert Bay	CBUT-16	11	11	

BC	Bonnington Falls	CBUDT	13	13	$218 964 each station
BC	Burns Lake	CH4333	7	7	
BC	Burns Lake	CKHS-TV	13	13	
BC	Canal Flats	CBUBT-1	12	12	
BC	Chetwynd	CBCD-TV-2	7	7	
BC	Clinton	CFJC-TV-4	9	9	
BC	Courtenay	CBUT-1	9	9	
BC	Cranbrook	CFCN-TV-9	5	5	
BC	Cranbrook	CBUBT-7	10	10	
BC	Fernie	CBUBT-9	8	8	
BC	Fort Fraser	CBCB-TV-2	13	13	
BC	Fort Nelson	CBUGT	8	8	
BC	Fort St John	CBCD-TV-3	9	9	
BC	Fraser Lake	CFFL-TV-1	9	9	
BC	Golden	CBUBT-2	13	13	
BC	Hazelton	CHHZ-TV	9	9	
BC	Houston	CFHO-TV	8	8	
BC	Nelson	CBUCT	9	9	
BC	Oliver	CBUT-42	6	6	
BC	Oliver	CHBC-TV-3	8	8	
BC	Ootsa Lake	CH4467	5	5	
BC	Ootsa Lake	CHHH-TV	10	10	
BC	Ootsa Lake	CHBL-TV	11	11	
BC	Penticton	CHKL-TV-1	10	10	
BC	Penticton	CHBC-TV-1	13	13	
BC	Port Hardy	CBUT-19	6	6	
BC	Purden Lake	CBUHT-1	10	10	
BC	Salmon Arm	CHBC-TV-4	9	9	
BC	Smithers	CBCY-TV-2	5	5	
BC	Smithers	CFHO-TV-1	13	13	
BC	Sparwood	CBUBT-10	11	11	
BC	Terrace	CBUFT-3	11	11	
BC	Valemount	CBUHT-5	12	12	
BC	Vernon	CHBC-TV-2	7	7	
BC	Vernon	CHKL-TV-2	12	12	
BC	Whistler	CBUWT	13	13	
BC	Woss Camp	CBUT-13	12	12	
MB	Flin Flon	CBWBT	10	10	
MB	Flin Flon	CKYF-TV	13	13	
MB	Gods Lake Narrow	CBWXT	13	13	
MB	Grand Rapids	CBWHT	8	8	

MB	Leaf Rapids	CBWQT	13	13	$218 964 each station
MB	Little Grand Rapids	CBWZT	9	9	
MB	Mccusker Lake	CBWUT	10	10	
MB	Melita	CKX-TV-2	9	9	
MB	Pine Falls	CBWFT-6	11	11	
MB	The Pas	CBWFT-1	6	6	
MB	The Pas	CBWIT	7	7	
MB	The Pas	CKYP-TV	12	12	
MB	Thompson	CBWTT	7	7	
MB	Thompson	CKYT-TV	9	9	
NF	Carmanville	CBNAT-7	7	7	
NF	Clarenville	CBNT-10	7	7	
NF	Clarenville	CJCV-TV	11	11	
NF	Conche	CBNAT-8	12	12	
NF	Corner Brook	CJWN-TV	10	10	
NF	Deer Lake	CJLW-TV	8	8	
NF	Deer Lake	CBYAT	12	12	
NF	Goose Bay	CFLA-TV	8	8	
NF	Goose Bay	CHTG-TV	12	12	
NF	Hampden	CBNAT-23	13	13	
NF	Labrador City	CBFT-12	11	11	
NF	Labrador City	CBNLT	13	13	
NF	Marystown	CJMA-TV	11	11	
NF	Millertown	CBNAT-5	9	9	
NF	Portland Creek	CBYT-8	13	13	
NF	Ramea	CBNT-25	13	13	
NF	Red Rocks	CJRR-TV	11	11	
NF	Rose Blanche	CBYT-11	9	9	
NF	Springdale	CBNAT-13	13	13	
NF	St Alban's	CBNT-4	9	9	
NF	St Mary's	CBNT-6	10	10	
NF	Sunnyside	CBNT-41	9	9	
NS	Aspen	CBHT-14	5	5	
NS	Bridgewater	CIHF-TV-6	9	9	
NS	Cheticamp	CBHFT-4	10	10	
NS	Dingwall	CBIT-16	12	12	
NS	Inverness	CBIT-19	8	8	
NS	Isle Madame	CIMC-TV	10	10	
NS	Liverpool	CBHT-1	12	12	
NS	Sydney	CBHFT-3	13	13	
NT	Fort Providence	CBEBT-3	13	13	

NT	Hay River	CBEBT-1	7	7	
NU	Cape Dorset	CBEJT	9	9	
ON	Chapleau	CBCU-TV	7	7	
ON	Chapleau	CBLFT-22	13	13	
ON	Dryden	CBWDT	9	9	
ON	Geraldton	CBLFT-26	7	7	
ON	Gogama	CBLFT-21	12	12	
ON	Hearst	CBLFT-5	7	7	
ON	Kapuskasing	CITO-TV-1	10	10	
ON	Kenora	CBWAT	8	8	
ON	Kenora	CJBN-TV	13	13	
ON	Marathon	CBLAT-4	11	11	
ON	Red Lake	CBWET	10	10	
ON	Sturgeon Falls	CBLFT-1	7	7	
ON	Timmins	CHCH-TV-7	11	11	
ON	White River	CBLAT-2	12	12	
PE	Elmira	CBCT-2	11	11	
PE	St Edward	CKCW-TV-2	5	5	
PE	St Edward	CBAFT-6	9	9	
QC	Aguanish	CBST-7	8	8	$218 964 each station
QC	Baie-Comeau	CFTF-TV-5	9	9	
QC	Blanc-Sablon	CBMST	5	5	
QC	Chandler	CHAU-TV-4	6	6	
QC	Chandler	CBGAT-15	8	8	
QC	Chapeau	CBOFT-1	11	11	
QC	Chibougamau	CBFAT	5	5	
QC	Cloridorme	CBGAT-16	8	8	
QC	Fermont	CBFT-13	7	7	
QC	Fermont	CBMRT	9	9	
QC	Gaspé	CHAU-TV-6	7	7	
QC	Gaspé	CBGAT-17	9	9	
QC	Grande-Vallée	CBGAT-3	6	6	
QC	Harrington-Harbour	CBST-11	8	8	
QC	Harrington-Harbour	CBMUT	13	13	
QC	Havre-St-Pierre	CBST-1	12	12	
QC	Iles-de-la-Madeleine	CBIMT	12	12	
QC	Joutel	CJDG-TV-3	11	11	
QC	La Tabatière	CBMLT	10	10	
QC	La Tuque	CBMET	9	9	
QC	Lac-Mégantic	CBVT-3	12	12	

QC	L'Anse-à-Valleau	CHAU-TV-9	12	12	
QC	Longue-Pointe-de-Mingan	CBST-18	6	6	
QC	Matagami	CJDG-TV-4	9	9	
QC	Mont-Climont	CBGAT-1	13	13	
QC	Port-Daniel	CBGAT-21	7	7	
QC	Radisson	CBFRT	8	8	
QC	Radisson	CFBJ-TV	10	10	
QC	Radisson	CJBJ-TV	13	13	
QC	Rivière-au-Tonnerre	CBST-6	7	7	
QC	Rivière-St-Paul	CBMPT	11	11	
QC	Schefferville	CBSET-1	7	7	
QC	Schefferville	CBFT-8	9	9	
QC	Sept-Îles	CFTF-TV-7	7	7	
QC	Sept-Îles	CBST	13	13	
QC	St-Fabien-de-Panet	CBVT-5	13	13	
QC	Temiscaming	CBFST-2	12	12	
QC	Waskaganish	CBFHT	9	9	
SK	Beauval	CBKBT	7	7	
SK	Big River	CIPA-TV-2	7	7	
SK	Buffalo Narrows	CBKDT	11	11	$218 964 each station
SK	Fond Du Lac	CBKAT-2	10	10	
SK	Fort Qu'Appelle	CKCK-TV-7	7	7	
SK	Hudson Bay	CBKT-10	9	9	
SK	Hudson Bay	CICC-TV-3	11	11	
SK	Ile-A-La-Crosse	CBKCT	9	9	
SK	Island Falls	CBWBT-2	7	7	
SK	La Loche	CBKDT-2	13	13	
SK	La Ronge	CBKST-2	12	12	
SK	Meadow Lake	CBCS-TV-1	8	8	
SK	Montreal Lake	CBKST-5	11	11	
SK	Nipawin	CBKST-15	10	10	
SK	Palmbere Lake	CBKDT-1	8	8	
SK	Pelican Narrows	CBWBT-3	5	5	
SK	Riverhurst	CBKT-5	10	10	
SK	Southend	CBKST-8	13	13	
SK	St Brieux	CBKFT-4	7	7	
SK	Stanley Mission	CBKST-4	8	8	
SK	Stony Rapids	CBKAT-3	7	7	
SK	Uranium City	CBKAT	8	8	
YT	Dawson	CBDDT	7	7	

YT	Watson Lake	CBDAT	8	8	$218 964 each station
YT	Whitehorse	CFWH-TV	6	6	
YT	Whitehorse	CBFT-15	7	7	
YT	Whitehorse	CHWT-TV	11	11	
Qty 89 - VHF STATIONS 41-150Watts		NOTE: including station operating on the same channel NTSC in DTV and stations moving from L-VHF to L-VHF and H-VHF to H-VHF.			
AB	Athabasca	CBXT-1	8	8	$237 214 each station
AB	Athabasca	CFRN-TV-12	13	13	
AB	Bonnyville	CKSA-TV-2	9	9	
AB	Etzikom	CBCA-TV-1	12	12	
AB	Fort Mcmurray	CBXT-6	9	9	
AB	Fort Mcmurray	CBXFT-6	12	12	
AB	Grande Prairie	CBXAT	10	10	
AB	Grande Prairie	CFRN-TV-1	13	13	
AB	Lougheed	CFRN-TV-7	7	7	
AB	Manning	CBXAT-3	12	12	
AB	Medicine Hat	CFCN-TV-8	8	8	
AB	Peace River	CBXAT-1	7	7	
AB	Red Deer	CFRN-TV-6	8	8	
BC	Campbell River	CHEK-TV-5	13	13	
BC	Courtenay	CHAN-TV-4	11	11	
BC	Crawford Bay	CBUCT-1	5	5	
BC	Dawson Creek	CJDC-TV	5	5	
BC	Mcbride	CBUHT-3	6	6	
MB	Fairford	CBWGT-2	7	7	
MB	Fisher Branch	CBWGT	10	10	
MB	Jackhead	CBWGT-1	5	5	
MB	Waasagomach	CBWWT	9	9	
NB	Campbellton	CBAFT-7	9	9	
NB	Edmundston	CIMT-TV-1	4	4	
NB	Edmundston	CBAFT-2	13	13	
NF	Bonavista	CJWB-TV	10	10	
NF	Cow Head	CBYT-6	8	8	
NF	Fox Harbour	CBNAT-10	7	7	
NF	Musgrave Harbour	CBNAT-11	9	9	
NF	Placentia	CBNT-2	12	12	
NF	Port Au Port	CBFNT	13	13	
NF	Port Rexton	CBNT-1	13	13	
NF	Roddickton	CBNAT-22	11	11	
NF	St Andrew's	CBYT-5	6	6	
NF	St Anthony	CBNAT-4	6	6	

NF	St Vincent's	CBNT-26	7	7	$237 214 each station
NF	Stephenville	CBYT-1	8	8	
NF	Wesleyville	CBNT-9	5	5	
NS	Canning	CJCH-TV-1	10	10	
NS	Middleton	CBHT-6	8	8	
NS	Sheet Harbour	CBHT-4	11	11	
NS	Shelburne	CBHT-2	7	7	
NS	Yarmouth	CBHT-3	11	11	
NT	Inuvik	CHAK-TV	6	6	
NT	Rae-Edzo	CFYK-TV-1	10	10	
NT	Yellowknife	CFYK-TV	8	8	
NT	Yellowknife	CHTY-TV	11	11	
NT	Yellowknife	CH4127	13	13	
ON	Atikokan	CBWCT-1	7	7	
ON	Dryden	CBWFT-9	6	6	
ON	Elliot Lake	CBEC-TV	7	7	
ON	Fort Albany	CBLDT	8	8	
ON	Geraldton	CBLGT	13	13	
ON	Hearst	CBCC-TV	5	5	
ON	Huntsville	CICA-TV-13	13	13	
ON	Kapuskasing	CBLFT-4	12	12	
ON	Manitouwage	CBLAT-1	8	8	
ON	Sioux Lookout	CBWDT-1	12	12	
ON	Sudbury	CBLFT-2	13	13	
ON	Thunder Bay	CICO-TV-9	9	9	
ON	Thunder Bay	CBLFT-18	12	12	
ON	Timmins	CBLFT-3	9	9	
ON	Timmins	CIII-TV-13	13	13	
ON	Wawa	CHBX-TV-1	7	7	
ON	Wawa	CBLAT-3	9	9	
QC	Beauceville	CBVT-6	6	6	
QC	Carleton	CHAU-TV	5	5	
QC	Forestville	CFTF-TV-4	4	4	
QC	Iles-de-la-Madeleine	CBMYT	7	7	
QC	Jonquière	CKTV-TV	12	12	
QC	Malartic	CBVD-TV	5	5	
QC	Matane	CBGAT	6	6	
QC	Mont-Tremblant	CBFT-1	11	11	
QC	Murdochville	CBGAT-2	10	10	
QC	Percé	CHAU-TV-5	13	13	
QC	Rimouski	CFER-TV	11	11	

QC	Rivière-au-Renard	CHAU-TV-7	4	4	
QC	Roberval	CJPM-TV-1	10	10	
QC	Sept-Îles	CFER-TV-2	5	5	
QC	Sherbrooke	CKSH-TV	9	9	
QC	Sherbrooke	CKMI-TV-2	11	11	
QC	Ste-Marguerite-Marie	CHAU-TV-1	3	3	$237 214 each station
SK	Alticane	CIPA-TV-1	10	10	
SK	Greenwater Lake	CBKST-11	4	4	
SK	Nipawin	CKBQ-TV-1	12	12	
SK	Norquay	CICC-TV-2	7	7	
SK	Shaunavon	CBCP-TV-1	7	7	
SK	Willow Bunch	CBKT-2	10	10	
SK	Wynyard	CBKT-8	6	6	
Qty 70 - VHF STATIONS 151-500Watts		NOTE: including station operating on the same channel NTSC in DTV and stations moving from L-VHF to L-VHF and H-VHF to H-VHF.			
AB	Ashmont	CFRN-TV-4	12	12	
AB	Drumheller	CFCN-TV-1	12	12	
AB	Falher	CBXFT-2	6	6	
AB	Lethbridge	CBRT-6	10	10	
AB	Lethbridge	CFCN-TV-5	13	13	
AB	Red Deer	CITV-TV-1	10	10	
AB	Rosemary	CBRT-5	11	11	
BC	Courtenay	CKVU-TV-1	5	5	
BC	Prince George	CIFG-TV	12	12	
BC	Trail	CBUAT	11	11	
MB	Dauphin	CKYD-TV	12	12	
MB	Fisher Branch	CKYA-TV	8	8	
MB	Foxwarren	CKX-TV-1	11	11	$338 464 each station
NB	Bon Accord	CBAT-TV-1	6	6	
NB	Chatham	CBAT-TV-3	6	6	
NB	Moncton	CBAT-TV-2	7	7	
NB	Moncton	CBAFT	11	11	
NB	Saint John	CKLT-TV	9	9	
NB	Saint John	CIHF-TV-2	12	12	
NB	Upsalquitch	CKAM-TV	12	12	
NF	Corner Brook	CBYT	5	5	
NF	Marystown	CBNT-3	5	5	
NF	Mt St Margaret	CBNAT-9	9	9	
NS	Antigonish	CJCB-TV-2	9	9	
NS	Inverness	CJCB-TV-1	6	6	

NS	Mulgrave	CBHFT-2	7	7	
NS	Mulgrave	CBHT-11	12	12	
NS	Sydney	CIHF-TV-7	11	11	
ON	Elliot Lake	CBLFT-6	12	12	
ON	Kearns	CITO-TV-2	11	11	
ON	Midland	CIII-TV-7	7	7	
ON	North Bay	CKNY-TV	10	10	
ON	Owen Sound	CICA-TV-12	12	12	
ON	Peterborough	CHEX-TV	12	12	
ON	Sudbury	CBLT-6	9	9	
ON	Sudbury	CFGC-TV	11	11	
ON	Timmins	CICA-TV-7	7	7	
PE	Charlottetown	CKCW-TV-1	8	8	
PE	Charlottetown	CBCT	13	13	
QC	Baie-Trinité	CIVF-TV	12	12	
QC	Chicoutimi	CIVV-TV	8	8	
QC	Percé	CBGAT-20	11	11	
QC	Rivière-du-Loup	CKRT-TV	7	7	
QC	Rivière-du-Loup	CIMT-TV	9	9	
QC	Rouyn-Noranda	CIVA-TV-1	8	8	
QC	Sherbrooke	CHLT-TV	7	7	$338 463,75 each station
QC	Ste-Anne-des-Monts	CBGAT-11	8	8	
QC	Trois-Rivières	CKTM-TV	13	13	
QC	Val-d'Or	CJDG-TV	7	7	
QC	Val-d'Or	CFEM-TV-1	10	10	
QC	Val-d'Or	CIVA-TV	12	12	
SK	Carlyle Lake	CIEW-TV	7	7	
SK	Colgate	CKCK-TV-1	12	12	
SK	Golden Prairie	CKMC-TV-1	10	10	
SK	Leoville	CBKST-3	12	12	
SK	Moose Jaw	CBKT-1	4	4	
SK	Moose Jaw	CKMJ-TV	7	7	
SK	Norquay	CBKT-9	13	13	
SK	North Battleford	CFQC-TV-2	6	6	
SK	North Battleford	CBKST-10	7	7	
SK	Prince Albert	CIPA-TV	9	9	
SK	Regina	CBKT	9	9	
SK	Regina	CBKFT	13	13	
SK	Saskatoon	CFQC-TV	8	8	
SK	Stranraer	CBKST-1	9	9	
SK	Swift Current	CBKT-4	5	5	
SK	Swift Current	CKMC-TV	12	12	

SK	Willow Bunch	CKCK-TV-2	6	6	$338 463,75 each station
SK	Wynyard	CIWH-TV	12	12	
SK	Yorkton	CICC-TV	10	10	
Qty 24 - VHF STATIONS 501W-1,1KW		NOTE: including station operating on the same channel NTSC in DTV and stations moving from L-VHF to L-VHF and H-VHF to H-VHF.			
AB	Bonnyville	CBXFT-1	6	6	$396 088 each station
AB	Coronation	CBXT-14	10	10	
AB	Lethbridge	CISA-TV	7	7	
AB	Lloydminster	CITL-TV	4	4	
BC	Trail	CKTN-TV	8	8	
MB	Portage La Prairie	CHMI-TV	13	13	
NF	Grand Falls	CBNAT	11	11	
NF	St John's	CBNT	8	8	
NS	Caledonia	CJCH-TV-6	6	6	
ON	Fort Frances	CBWCT	5	5	
ON	Huntsville	CKNY-TV-11	11	11	
ON	Kingston	CKWS-TV	11	11	
ON	North Bay	CICA-TV-6	6	6	
ON	Paris	CIII-TV	6	6	
ON	Timmins	CBLT-7	6	6	
QC	Chicoutimi	CJPM-TV	6	6	
QC	Rouyn-Noranda	CFEM-TV	13	13	
QC	Sept-Îles	CIVG-TV	9	9	
QC	Trois-Rivières	CHEM-TV	8	8	
SK	Prince Albert	CBKST-9	5	5	
SK	Regina	CFRE-TV	11	11	
SK	Saskatoon	CBKST	11	11	
SK	Saskatoon	CBKFT-1	13	13	
SK	Yorkton	CBKT-6	5	5	
Qty 118- Different channel		NOTE: including stations moving from L-VHF to H-VHF, H-VHF to L-VHF, VHF to UHF and UHF to VHF .			

The cost for the conversion of these stations in study 2 is identical to the cost of study 1. The reason is because the maximum parameters of Industry Canada were used to calculate the transmitter power. Therefore, no calculations were executed from our part resulting in a contour duplication that does not account of service availability.

11.3 Cost breakdown for Study 3 - Practical Service Replication

*The study 3 i*s identical to Study 2, but assumes that all stations in markets where the population is less than 300,000 will re-use the same channel as the analog station in order to reduce costs.

Qty 118- Different channel		NOTE: All VHF stations are staying on their VHF channel.			
Province	**City**	**Call sign**	**DTV channel**	**NTSC channel**	**Cost**
AB	Burmis	CISA-TV-1	3	3	$206,763
AB	Coutts/Milkriver	CBRT-16	4	4	$206,763
AB	High Prairie	CBXAT-2	2	2	$216,263
AB	Hinton	CBXFT-7	3	3	$206,763
AB	Lac La Biche	CFRN-TV-5	2	2	$216,263
AB	Lethbridge	CKAL-TV-1	2	2	$336,589
AB	Lloydminster	CKSA-TV	2	2	$395,619
AB	Medicine Hat	CHAT-TV	6	6	$336,589
AB	Peace River	CFRN-TV-2	3	3	$206,763
AB	Pivot	CHAT-TV-1	4	4	$206,763
AB	Red Deer	CHCA-TV	6	6	$395,619
AB	Red Deer	CKEM-TV-1	4	4	$206,763
BC	100 Mile House	CITM-TV	3	3	$206,763
BC	Burns Lake	CBCY-TV-1	4	4	$206,763
BC	Chilliwack	CBUT-2	3	3	$206,763
BC	Creston	CBUCT-2	3	3	$206,763
BC	Houston	CBCY-TV	2	2	$206,763
BC	Kamloops	CHKM-TV	6	6	$336,589
BC	Kamloops	CFJC-TV	4	4	$235,339
BC	Kelowna	CHBC-TV	2	2	$235,339
BC	Kelowna	CHKL-TV	5	5	$235,339
BC	Nelson	CKTN-TV-3	3	3	$206,763
BC	Oliver/Osoyoos	CKKM-TV	3	3	$206,763
BC	Pemberton	CBUPT	4	4	$206,763
BC	Prince George	CBUFT-4	4	4	$206,763
BC	Prince George	CKPG-TV	2	2	$235,339
BC	Prince Rupert	CFTK-TV-1	6	6	$206, 763
BC	Salmon Arm	CBUT-43	3	3	$206,763
BC	Terrace	CFTK-TV	3	3	$336,589
MB	Brandon	CKX-TV	5	5	$395,619
MB	Brandon	CKYB-TV	4	4	$395,619
MB	Flin Flon	CBWFT-2	3	3	$206,763
MB	Lac Du Bonnet	CBWT-2	4	4	$235,339
MB	Mafeking	CBWYT	2	2	$216,263
MB	Mccreary	CKX-TV-3	11	11	$336,589
MB	Minnedosa	CKND-TV-2	2	2	$432,744
MB	Ste Rose Du Lac	CBWFT-4	3	3	$235,339
MB	Thompson	CBWFT-5	5	5	$206,763
NB	Allardville	CBAFT-3	3	3	$399,525
NB	Campbellton	CKCD-TV	7	7	$206,763

NB	Campbellton	CBAT-TV-4	4	4	$336,589
NB	Florenceville	CKLT-TV-1	3	3	$336,589
NB	Fredericton	CBAFT-1	5	5	$336,589
NB	Fredericton	CIHF-TV-1	11	11	$216,263
NB	Moncton	CKCW-TV	2	2	$395,619
NB	Saint John	CBAT-TV	4	4	$336,589
NF	Argentia	CJOM-TV	3	3	$235,339
NF	Baie Verte	CBNAT-1	3	3	$336,589
NF	Bonne Bay	CBYT-3	2	2	$216,263
NF	Grand Bank	CJOX-TV-1	2	2	$235,339
NF	Grand Falls	CJCN-TV	4	4	$399,525
NF	Hawke's Bay	CBYT-9	4	4	$216,263
NF	Hermitage	CBNT-24	4	4	$336,589
NF	Port Aux Basques	CBYT-4	3	3	$216,263
NF	St John's	CBFJ-TV	4	4	$206,763
NF	St John's	CJON-TV	6	6	$395,619
NF	Stephenville	CJSV-TV	4	4	$336,589
NF	Trepassey	CBNT-39	4	4	$206,763
NS	Caledonia	CBHT-9	2	2	$216,263
NS	Cheticamp	CBIT-2	2	2	$235,339
NS	New Glasgow	CBHT-5	4	4	$206,763
NS	Port Hawkesbury	CJCB-TV-6	3	3	$336,589
NS	Sheet Harbour	CJCH-TV-5	2	2	$206,763
NS	Shelburne	CIHF-TV-9	10	10	$206,763
NS	Sydney	CJCB-TV	4	4	$432,744
NS	Sydney	CBIT	5	5	$395,619
NS	Yarmouth	CBHFT-1	3	3	$336,589
ON	Bancroft	CIII-TV-2	2	2	$399,525
ON	Barrie	CKVR-TV	3	3	$432,744
ON	Chatham	CBLFT-10	48	48	$198,263
ON	Cornwall	CJOH-TV-8	8	8	$336,589
ON	Deseronto	CJOH-TV-6	6	6	$399,525
ON	Elliot Lake	CICI-TV-1	3	3	$336,589
ON	Hearst	CITO-TV-3	4	4	$206,763
ON	Huntsville	CBLT-TV-2	8	8	$235,339
ON	Kapuskasing	CBLT-9	2	2	$206,763
ON	Kearns	CBLT-8	2	2	$336,589
ON	Kenora	CBWFT-7	2	2	$216,263
ON	North Bay	CFGC-TV-2	2	2	$216,263
ON	North Bay	CBLT-4	4	4	$395,619
ON	Owen Sound	CIII-TV-4	4	4	$336,589
ON	Pembroke	CBOT-6	3	3	$336,589
ON	Pembroke	CHRO-TV	5	5	$432,744
ON	Sault Ste Marie	CHBX-TV	2	2	$432,744
ON	Sault Ste Marie	CBLT-5	5	5	$336,589
ON	Sudbury	CICI-TV	5	5	$432744
ON	Thunder Bay	CHFD-TV	4	4	$395,619
ON	Thunder Bay	CKPR-TV	2	2	$395,619
ON	Timmins	CITO-TV	3	3	$395,619
ON	Wiarton	CKCO-TV-2	2	2	$395,619

ON	Wingham	CKNX-TV	8	8	$336,589
PE	St Edward	CBCT-1	4	4	$206,763
QC	Bearn/Fabre	CKRN-TV-3	3	3	$216,263
QC	Blanc-Sablon	CBST-17	3	3	$206,763
QC	Carleton	CBGAT-14	2	2	$336,589
QC	Chibougamau	CBMCT	4	4	$206,763
QC	Cloridorme	CHAU-TV-8	11	11	$206,763
QC	Jonquière	CFRS-TV	4	4	$216,263
QC	La Tabatière	CBST-13	4	4	$206,763
QC	La Tuque	CBFT-14	3	3	$399,525
QC	Mont-Laurier	CBFT-2	3	3	$336,589
QC	Radisson	CH2440	6	6	$206,763
QC	Rapides-des-Joachims	CBOFT-2	8	8	$206,763
QC	Rimouski	CJBR-TV	2	2	$395,619
QC	Rivière-au-Renard	CBGAT-22	2	2	$235,339
QC	Rouyn-Noranda	CKRN-TV	4	4	$395,619
QC	Sept-Îles	CBSET	3	3	$206,763
QC	St-Michel-des-Saints	CBFT-3	7	7	$206,763
QC	St-Pamphile	CBSPT	3	3	$206,763
SK	Cypress Hills	CBCP-TV-2	2	2	$216,263
SK	Melfort	CKBQ-TV	2	2	$235,339
SK	Ponteix	CBCP-TV-3	3	3	$235,339
SK	Prince Albert	CBKFT-2	3	3	$216,263
SK	Regina	CKCK-TV	2	2	$432,744
SK	Saskatoon	CFSK-TV	4	4	$395.619
SK	Spiritwood	CBKST-13	2	2	$235,339
SK	Stranraer	CFQC-TV-1	3	3	$395,619
SK	Warmley	CBKT-7	3	3	$395,619

12. STRATEGY AND RECOMMENDATIONS FOR CONVERSION TO DTV

The following chart represents the typical timeline required to design and built a DTV station, for those stations that are required to change channels (expect some time reduction for those staying on the same channel):

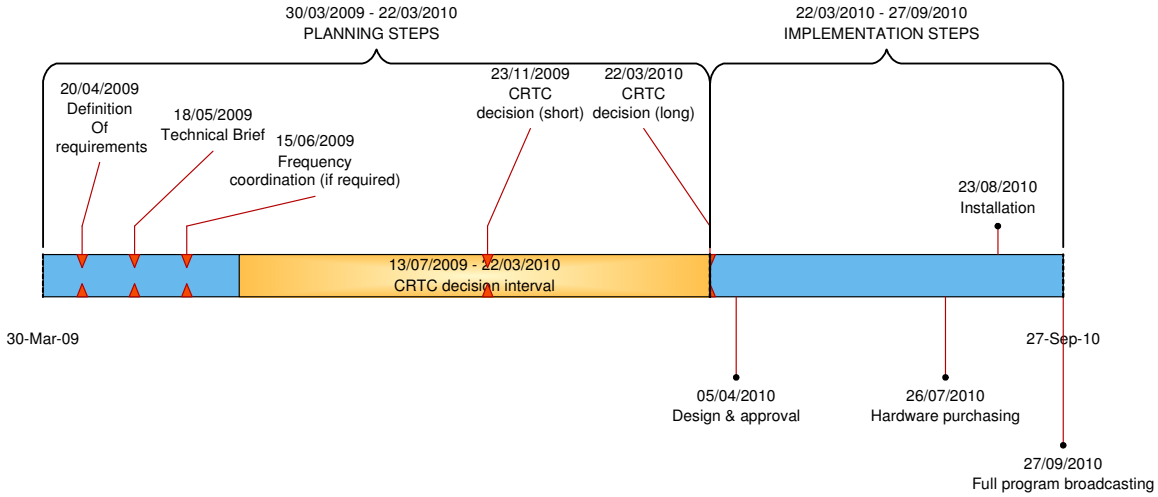


Figure 11 - Timeline for new DTV station changing channel

Planning steps

1. Definition of requirements

a. Meeting with the client to define his needs;
b. Study of the technical parameters;
c. Provision of a budgetary estimates to implement the project;
d. Approval of the technical and financial parameters by the client.

NOTE: Administrative approval time can take up to 1 month.

Time required: forecast 3 weeks.

2. Technical brief

a. Production of the Technical brief

Time required: forecast 4 weeks.

b. Submission of the technical brief to IC. The client will submit his application to the CRTC.
c. If required, frequency coordination with other broadcasters will be made.

Time required: forecast 4 weeks.

d. The CRTC and IC will study the demand and give their decision.

Time required: forecast 24 to 40 weeks.

Implementation Steps

1. Design of the station and approval by the client.

   Time required: forecast 2 weeks.

   NOTE: The design time is for the RF portion only. If tower and building structure modifications are required, more time should be allocated.

2. Purchase of the hardware.

   Time required: forecast 4 to 16 weeks.

NOTE: Antennas and combiners may take up to 16 weeks to be manufactured and delivered to the site.

3. Installation of antenna and transmission line. If required, tower strengthening will be done at the same time.

   Time required: forecast 1 to 2 weeks.

4. Installation of transmitter and hardware. This includes the electrical, mechanical and architectural modification to the building.

   Time required: forecast 2 to 4 weeks.

5. Site acceptance test of transmitter and antenna including proof of performance of the station.

   Time required: forecast 1 week

6. Start of on-air testing with Industry Canada.

   Time required: forecast minimum 3 weeks.

7. Full program broadcasting.

TOTAL: between 48 to 79 weeks.

As one can see, many parameters must be identified and studied in the design as well as in the implementation phase of the project.

The most cost effective approach to engineering the transition to DTV is to initially establish clear coverage objectives for the study. The technical requirements to achieve this coverage can then be formulated into a suitable implementation strategy. Spectrum Expert recommends to study the impact of planning a new DTV station in terms of realistic predictions (CRC-Predict or Longley-Rice) using statistic variations of P(90,90). This conservative prediction method will clearly indentify the areas where the signal is likely to be received and those regions that will remain unserved. Both of these areas of interest could be cross-matched with off-air viewing, cable must-carry and substitution obligation from BBM statistical data. Since all stations are different, only a custom design can fulfill this required coverage objective.

A point not covered in this report is the possible usage of Single Frequency Network (SFN) in ATSC. As demonstrated many times at the NAB and other seminars, the usage of SFN can create a way to provide a signal where the population resides. In fact, instead of implementing a huge DTV station of 1 MW of ERP, it would be more cost effective to consider 2-3 smaller sites in SFN, with an audience targeted approach (instead of broadcasting a huge signal mostly into unpopulated region).

The deadline for the conversion of OAT to digital by the year 2011 is rapidly approaching. Broadcasters must immediately initiate technical and financial plans to meet this schedule with the goal of finalizing their studies and submitting their technical briefs to IC as soon as possible. The demand to prepare 700 technical briefs will be much greater than the available capacity afforded by accredited engineer support services. It must also be remembered that if a station is not implemented as described in the technical brief, IC can request that an “as built” technical brief be submitted at the end of the installation, prior to IC officially granting approval to operate the station.

With regards to the implementation of the station, special attention should be considered with the selection of the component such as the antenna or combiner systems. An antenna system and transmission line with good VSWR performance will provide a much better Signal to Noise Ration (SNR) at the transmitter, which will result in an improved SNR in the field (better coverage). Although new technology such as “adaptive pre-correction” will help mitigate typical impedance mismatch, the results may differ from the test performed into a dummy load. At many transmitter sites, multi-station combining into a common antenna system is standard practice and these scenarios were not studied in this report. The technical specifications of the combining system must be judiciously selected to insure that overall transmission system performance will not be degraded.

ANNEX A – LIST OF NTSC TRANSMITTER POWER

PROVINCE	CITY	CALL SIGN	ERPVAV (Watt)	ERPVPK (Watt)	CH	**Real Rad. Center(m)**	**System losses(dB)**	**Transmitter estimated operating power(Watt)**	**Closest Gain from Kathrein Catalog (dB)**	**Antenna Peak to Average Ratio(dB)**
AB	Ashmont	CFRN-TV-4	14600	26650	12	**180**	1,690224	**5250**	6,1	2,61
AB	Athabasca	CBXT-1	25700	51000	8	**149**	1,47832	**2375**	11,8	2,98
AB	Athabasca	CFRN-TV-12	1800	3300	13	**88**	6,964032	**1150**	8,9	2,63
AB	Bonnyville	CBXFT-1	67000	100000	6	**163**	0,913744	**12700**	8,1	1,74
AB	Bonnyville	CKSA-TV-2	20750	41500	9	**163**	1,577392	**1950**	11,8	3,01
AB	Bow Island	CJIL-TV-1	3820	13860	39	**71**	1,82915	**225**	14,1	5,60
AB	Burmis	CBRT-8	813	2014	47	**46**	2,241	**80**	12,3	3,94
AB	Burmis	CFCN-TV-4	382	382	5	**41**	0,3964814	**420**	0	0,00
AB	Burmis	CISA-TV-1	225	409	3	**35**	0,39165	**495**	-3	2,60
AB	Burmis	CJIL-TV-2	790	1900	55	**41**	2,0767	**75**	12,3	3,81
AB	Calgary	CBRFT	2590	4400	16	**168**	3,50898	**340**	12,3	2,30
AB	Calgary	CBRT	178000	325000	9	**258**	2,225488	**19500**	11,8	2,61
AB	Calgary	CFCN-TV	100000	100000	4	**128**	0,802828	**18500**	8,1	0,00
AB	Calgary	CHCA-TV-1	26000	42000	44	**150**	2,5445	**2740**	12,3	2,08
AB	Calgary	CIAN-TV	2400	9900	13	**158**	13,688234	**13750**	6,1	6,15
AB	Calgary	CICT-TV	100000	100000	2	**193**	1,006964	**19500**	8,1	0,00
AB	Calgary	CJCO-TV	228000	228000	38	**146**	2,48465	**15600**	14,1	0,00
AB	Calgary	CKAL-TV	33600	79400	5	**169**	0,930808	**6400**	8,1	3,73
AB	Calgary	CKCS-TV	75000	75000	32	**146**	2,48465	**7800**	12,3	0,00
AB	Chateh	CBXAT-7	210	816	5	**58**	0,4106424	**465**	-3	5,89
AB	Coronation	CBXT-14	98000	210000	10	**66**	0,910032	**15500**	8,9	3,31
AB	Coutts/Milkriver	CBRT-16	420	420	4	**65**	0,4165567	**466**	0	0,00
AB	Drumheller	CFCN-TV-1	40000	80000	12	**165**	1,585648	**7350**	8,9	3,01
AB	Edmonton	CBXFT	90000	90000	11	**117**	1,260912	**7900**	11,8	0,00
AB	Edmonton	CBXT	318000	318000	5	**177**	0,956088	**30500**	11,1	0,00
AB	Edmonton	CFRN-TV	250000	609000	3	**211**	1,06258	**24500**	11,1	3,87
AB	Edmonton	CHCA-TV-2	92000	92000	17	**215**	3,40235	**3900**	17,1	0,00
AB	Edmonton	CITV-TV	325000	325000	13	**261**	2,250256	**24000**	13,5	0,00
AB	Edmonton	CJAL-TV	8200	15000	9	**155**	1,517536	**760**	11,8	2,62
AB	Edmonton	CJEO-TV	413000	580000	56	**267**	2,3099	**13500**	17,1	1,47
AB	Edmonton	CKEM-TV	704000	704000	51	**215**	2,041415	**21500**	17,1	0,00
AB	Edmonton	CKES-TV	32500	71000	45	**158**	2,6509	**2325**	14,1	3,39
AB	Etzikom	CBCA-TV-1	16000	40000	12	**126**	1,32008	**2775**	8,9	3,98
AB	Falher	CBXFT-2	3200	5350	6	**84**	0,810815	**2420**	2	2,23
AB	Forestburg	CBXT-12	28476	28476	52	**96**	1,82231	**1675**	14,1	0,00

PROVINCE	CITY	CALL SIGN	ERPVAV (Watt)	ERPVPK (Watt)	CH	**Real Rad. Center(m)**	**System losses(dB)**	**Transmitter estimated operating power(Watt)**	**Closest Gain from Kathrein Catalog (dB)**	**Antenna Peak to Average Ratio(dB)**
AB	Fort McMurray	CBXFT-6	5800	16600	12	**88**	4,409046	**1050**	11,8	4,57
AB	Fort McMurray	CBXT-6	5800	16600	9	**93**	4,453114	**1060**	11,8	4,57
AB	Fort Vermilion	CBXAT-5	4600	17300	11	**91**	3,917592	**745**	11,8	5,75
AB	Grande Prairie	CBXAT	36000	71000	10	**152**	1,501712	**3350**	11,8	2,95
AB	Grande Prairie	CBXFT-8	2700	11400	19	**154**	3,27197	**670**	9,3	6,26
AB	Grande Prairie	CFRN-TV-1	32000	64000	13	**196**	1,79824	**3175**	11,8	3,01
AB	Grouard Mission	CFRN-TV-8	6000	10000	18	**112**	2,04442	**1125**	9,3	2,22
AB	High Level	CBXAT-4	468	1320	8	**69**	0,494308	**520**	0	4,50
AB	High Prairie	CBXAT-2	6200	11200	2	**100**	0,7134	**1125**	8,1	2,57
AB	Hinton	CBXFT-7	30	200	3	**27**	0,3853192	**66**	-3	8,24
AB	Hinton	CBXT-3	580	1160	8	**35**	0,436688	**433**	1,7	3,01
AB	Jean D'Or	CBXAT-9	28	80	13	**64**	0,485364	**62**	-3	4,56
AB	Lac La Biche	CBXT-5	825	1650	10	**61**	0,481236	**622**	1,7	3,01
AB	Lac La Biche	CFRN-TV-5	2130	8656	2	**92**	0,84755	**810**	5	6,09
AB	Lethbridge	CBRT-6	123000	222000	10	**180**	1,690224	**11900**	11,8	2,56
AB	Lethbridge	CBXFT-3	620	1056	23	**126**	4,7086	**107**	12,3	2,31
AB	Lethbridge	CFCN-TV-5	57000	139000	13	**163**	1,577392	**10500**	8,9	3,87
AB	Lethbridge	CISA-TV	167000	325000	7	**195**	1,7948	**16600**	11,8	2,89
AB	Lethbridge	CJIL-TV	31600	100000	17	**129**	2,2652	**1030**	17,1	5,00
AB	Lethbridge	CKAL-TV-1	46600	100000	2	**178**	0,95988	**8900**	8,1	3,32
AB	Lloydminster	CITL-TV	130000	130000	4	**198**	1,024344	**16700**	9,9	0,00
AB	Lloydminster	CKSA-TV	116000	116000	2	**198**	1,024344	**15000**	9,9	0,00
AB	Lougheed	CFRN-TV-7	5000	21000	7	**158**	9,305384	**2800**	11,8	6,23
AB	Manning	CBXAT-3	1770	3540	12	**85**	7,46315	**2420**	6,1	3,01
AB	Medicine Hat	CBXFT-11	619	2600	34	**94**	3,7228	**85**	12,3	6,23
AB	Medicine Hat	CFCN-TV-8	5800	24600	8	**90**	8,920268	**2975**	11,8	6,28
AB	Medicine Hat	CHAT-TV	30000	58000	6	**151**	0,875824	**5650**	8,1	2,86
AB	Oyen	CFCN-TV-16	540	710	2	**84**	0,4325503	**376**	2	1,19
AB	Peace River	CBXAT-1	4800	9600	7	**70**	6,3854	**2690**	8,9	3,01
AB	Peace River	CBXFT-5	1270	2000	9	**49**	6,181346	**675**	8,9	1,97
AB	Peace River	CFRN-TV-2	2400	4300	3	**107**	0,9173	**455**	8,1	2,53
AB	Pivot	CHAT-TV-1	2750	4900	4	**156**	1,14515	**550**	8,1	2,51
AB	Plamondon/Lac Labich	CBXFT-9	6000	25200	22	**95**	1,81433	**1060**	9,3	6,23
AB	Red Deer	CBXFT-4	4340	7200	31	**175**	3,63354	**147**	18,3	2,20
AB	Red Deer	CBXT-13	417500	759300	22	**175**	1,66911	**11800**	17,1	2,60

PROVINCE	CITY	CALL SIGN	ERPVAV (Watt)	ERPVPK (Watt)	CH	**Real Rad. Center(m)**	**System losses(dB)**	**Transmitter estimated operating power(Watt)**	**Closest Gain from Kathrein Catalog (dB)**	**Antenna Peak to Average Ratio(dB)**
AB	Red Deer	CFRN-TV-6	22000	71000	8	**201**	1,83264	**2200**	11,8	5,09
AB	Red Deer	CHCA-TV	56000	100000	6	**161**	0,905844	**10600**	8,1	2,52
AB	Red Deer	CITV-TV-1	180000	325000	10	**176**	1,661328	**11700**	13,5	2,57
AB	Red Deer	CKEM-TV-1	3480	7000	4	**132**	1,03541	**680**	8,1	3,04
AB	Rocky Mountain House	CFRN-TV-10	420	1600	12	**64**	0,48502	**475**	0	5,81
AB	Rosemary	CBRT-5	125450	227250	11	**186**	1,732192	**12300**	11,8	2,58
AB	Slave Lake	CBXAT-11	672	4662	11	**64**	0,48588	**508**	1,7	8,41
AB	Slave Lake	CFRN-TV-9	320	840	4	**50**	0,4043116	**350**	0	4,19
AB	Whitecourt	CBXT-2	9400	18800	9	**67**	0,912784	**1480**	8,9	3,01
AB	Whitecourt	CFRN-TV-3	9800	17900	12	**55**	0,828848	**775**	11,8	2,62
BC	100 Mile House	CFJC-TV-6	980	980	5	**15**	0,3749067	**670**	2	0,00
BC	100 Mile House	CITM-TV	720	1300	3	**41**	0,3964814	**497**	2	2,57
BC	Alert Bay	CBUT-16	172	386	11	**75**	0,5048	**385**	-3	3,51
BC	Burns Lake	CBCY-TV-1	311	597	4	**46**	0,400813	**340**	0	2,83
BC	Burns Lake	CKHS-TV	16	63	13	**10**	0,393	**35**	-3	5,95
BC	Campbell River	CHEK-TV-5	1000	3000	13	**73**	10,614012	**1480**	8,9	4,77
BC	Canal Flats	CBUBT-1	510	9570	12	**40**	0,444944	**382**	1,7	12,73
BC	Chetwynd	CBCD-TV-2	16	55	7	**31**	0,42826	**35**	-3	5,36
BC	Chilliwack	CBUFT-6	480	870	14	**32**	1,7977	**85**	9,3	2,58
BC	Chilliwack	CBUT-2	590	1510	3	**26**	0,3840697	**406**	2	4,08
BC	Clinton	CFJC-TV-4	204	204	9	**8**	0,38956	**445**	-3	0,00
BC	Courtenay	CBUT-1	625	1250	9	**67**	0,49018	**473**	1,7	3,01
BC	Courtenay	CHAN-TV-4	1300	2550	11	**21**	10,111062	**3260**	6,1	2,93
BC	Courtenay	CKVU-TV-1	9800	17700	5	**53**	0,564564	**3500**	5	2,57
BC	Cranbrook	CBUBT-7	900	2200	10	**17**	0,405212	**665**	1,7	3,88
BC	Cranbrook	CFCN-TV-9	116	446	5	**18**	0,377489	**255**	-3	5,85
BC	Crawford Bay	CBUCT-1	468	935	5	**42**	0,3977309	**510**	0	3,01
BC	Creston	CBUCT-2	142	790	3	**46**	0,4005631	**310**	-3	7,45
BC	Dawson Creek	CBUFT-5	470	2400	33,0	**116**	4,4048	**152**	9,3	7,08
BC	Dawson Creek	CJDC-TV	5000	9500	5	**128**	1,01495	**975**	8,1	2,79
BC	Enderby	CBUT-44	886	2388	26	**25**	1,59	**75**	12,3	4,31
BC	Enderby	CHBC-TV-5	260	2400	16	**31**	1,7884	**92**	6,3	9,65
BC	Fernie	CBUBT-8	30	320	21	**3**	0,908	**8**	6,3	10,28
BC	Fernie	CBUBT-9	58	1000	8	**31**	0,42826	**128**	-3	12,37
BC	Fort Fraser	CBCB-TV-2	300	830	13	**58**	0,47556	**335**	0	4,42

PROVINCE	CITY	CALL SIGN	ERPVAV (Watt)	ERPVPK (Watt)	CH	**Real Rad. Center(m)**	**System losses(dB)**	**Transmitter estimated operating power(Watt)**	**Closest Gain from Kathrein Catalog (dB)**	**Antenna Peak to Average Ratio(dB)**
BC	Fort Nelson	CBUGT	1070	1070	8	**81**	5,64774	**505**	8,9	0,00
BC	Fort St John	CBCD-TV-3	180	660	9	**59**	0,477968	**400**	-3	5,64
BC	Fraser Lake	CFFL-TV-1	116	324	9	**25**	0,4188	**255**	-3	4,46
BC	Fraser Valley	CHNU-TV	16000	43000	66	**34**	0,99505	**2350**	9,3	4,29
BC	Golden	CBUBT-2	11	157	13	**47**	0,456984	**24**	-3	11,55
BC	Hazelton	CHHZ-TV	96	303	9	**15**	0,4016	**210**	-3	4,99
BC	Houston	CBCY-TV	293	641	2	**67**	0,418306	**326**	0	3,40
BC	Houston	CFHO-TV	132	390	8	**57**	0,47384	**295**	-3	4,70
BC	Kamloops	CBUFT-2	1540	2624	50	**25**	1,03681	**455**	6,3	2,31
BC	Kamloops	CFJC-TV	3700	3700	4	**35**	0,58157	**2650**	2	0,00
BC	Kamloops	CHKM-TV	4000	4000	6	**35**	0,58157	**2875**	2	0,00
BC	Kelowna	CBUFT-1	1400	2500	21	**26**	1,06276	**210**	9,3	2,52
BC	Kelowna	CBUT-38	8100	14000	45	**26**	0,89796	**1160**	9,3	2,38
BC	Kelowna	CHBC-TV	3700	3700	2	**28**	0,551345	**2650**	2	0,00
BC	Kelowna	CHKL-TV	4000	7000	5	**35**	0,5825	**2875**	2	2,43
BC	Mcbride	CBUHT-3	750	3000	6	**43**	0,398314	**518**	2	6,02
BC	Nelson	CBUCT	974	2245	9	**66**	0,48846	**735**	1,7	3,63
BC	Nelson	CKTN-TV-3	135	330	3	**44**	0,399147	**298**	-3	3,88
BC	New Denver	CBUCT-6	722	2500	17	**30**	1,745	**126**	9,3	5,39
BC	Oliver	CHBC-TV-3	110	220	8	**17**	0,405728	**240**	-3	3,01
BC	Oliver/Osoyoos	CKKM-TV	930	930	3	**34**	0,3904005	**641**	2	0,00
BC	Ootsa Lake	CHBL-TV	121	162	11	**15**	0,4016	**265**	-3	1,27
BC	Ootsa Lake	CHHH-TV	141	320	10	**30**	0,4274	**310**	-3	3,56
BC	Osoyoos	CBUT-42	104	230	6	**24**	0,382487	**225**	-3	3,45
BC	Pemberton	CBUPT	41	195	4	**29**	0,386652	**90**	-3	6,77
BC	Penticton	CBUT-40	1500	3980	17	**34**	1,18905	**460**	6,3	4,24
BC	Penticton	CHBC-TV-1	300	540	13	**28**	0,423444	**330**	0	2,55
BC	Penticton	CHKL-TV-1	440	1080	10	**20**	0,4102	**487**	0	3,90
BC	Port Hardy	CBUT-19	226	400	6	**47**	0,4014794	**495**	-3	2,48
BC	Prince George	CBUFT-4	36	72	4	**27**	0,3853192	**78**	-3	3,01
BC	Prince George	CIFG-TV	1900	4700	12	**28**	12,60282	**8400**	6,1	3,93
BC	Prince George	CKPG-TV	4600	8300	2	**66**	0,72572	**1700**	5	2,56
BC	Prince Rupert	CFTK-TV-1	1250	2440	6	**48**	0,640625	**455**	5	2,90
BC	Purden Lake	CBUHT-1	38	156	10	**60**	0,479	**85**	-3	6,13
BC	Radium Hot Springs	CBUBT-5	200	4600	17	**27**	1,6644	**68**	6,3	13,62
BC	Salmon Arm	CBUT-43	55	95	3	**79**	0,428302	**122**	-3	2,37

PROVINCE	CITY	CALL SIGN	ERPVAV (Watt)	ERPVPK (Watt)	CH	**Real Rad. Center(m)**	**System losses(dB)**	**Transmitter estimated operating power(Watt)**	**Closest Gain from Kathrein Catalog (dB)**	**Antenna Peak to Average Ratio(dB)**
BC	Salmon Arm	CHBC-TV-4	199	486	9	**34**	0,43342	**440**	-3	3,88
BC	Smithers	CBCY-TV-2	155	622	5	**27**	0,384986	**340**	-3	6,03
BC	Smithers	CFHO-TV-1	99	213	13	**36**	0,43772	**220**	-3	3,33
BC	Sparwood	CBUBT-10	99	1206	11	**17**	0,40504	**215**	-3	10,86
BC	Spillimacheen	CBUBT-6	930	18400	69	**15**	1,2862	**146**	9,3	12,96
BC	Terrace	CBUFT-3	660	1210	11	**31**	0,42826	**490**	1,7	2,63
BC	Terrace	CFTK-TV	7600	13800	3	**23**	0,469764	**5300**	2	2,59
BC	Trail	CBUAT	1680	2940	11	**63**	13,361556	**4650**	8,9	2,43
BC	Trail	CKTN-TV	4200	18000	8	**51**	15,734522	**20200**	8,9	6,32
BC	Valemount	CBUHT-5	446	1567	12	**26**	0,42052	**495**	0	5,46
BC	Vancouver	CBUFT	34800	68000	26	**85**	1,68532	**1975**	14,1	2,91
BC	Vancouver	CBUT	50000	100000	2	**66**	0,60438	**8800**	8,1	3,01
BC	Vancouver	CHAN-TV	125900	250000	8	**82**	1,014608	**10500**	11,8	2,98
BC	Vancouver	CHNM-TV	76000	130000	42	**87**	1,71192	**4350**	14,1	2,33
BC	Vancouver	CIVI-TV-2	48000	100000	17	**85**	1,67601	**4150**	12,3	3,19
BC	Vancouver	CIVT-TV	710000	2000000	32	**111**	1,277883	**18500**	17,1	4,50
BC	Vancouver	CKVU-TV	325000	325000	10	**57**	0,842608	**17000**	13,5	0,00
BC	Vernon	CBUT-41	1824	4235	18	**24**	1,0247	**540**	6,3	3,66
BC	Vernon	CHBC-TV-2	310	620	7	**28**	0,424648	**340**	0	3,01
BC	Vernon	CHKL-TV-2	231	564	12	**20**	0,410888	**510**	-3	3,88
BC	Victoria	CHEK-TV	60000	100000	6	**116**	0,76396	**11000**	8,1	2,22
BC	Victoria	CHNM-TV-1	3300	8800	29	T.O.				
BC	Victoria	CHNU-TV-1	8000	17700	21	**84**	1,66271	**455**	14,1	3,45
BC	Victoria	CIVI-TV	12000	23000	53	**84**	1,66271	**1025**	12,3	2,83
BC	Whistler	CBUWT	107	270	13	**61**	0,480548	**240**	-3	4,02
BC	Wilson Creek	CHAN-TV-6	8400	19300	23	**49**	1,19721	**650**	12,3	3,61
BC	Woss Camp	CBUT-13	447	1414	12	**34**	0,43342	**499**	0	5,00
MB	Brandon	CBWFT-10	5500	9400	21	**107**	2,45541	**1125**	9,3	2,33
MB	Brandon	CKX-TV	50900	100000	5	**373**	1,575448	**11300**	8,1	2,93
MB	Brandon	CKYB-TV	54700	100000	4	**373**	1,575448	**12100**	8,1	2,62
MB	Dauphin	CBWST	120000	300000	8	**165**	1,585648	**11400**	11,8	3,98
MB	Dauphin	CKYD-TV	55000	140000	12	**169**	1,615232	**10200**	8,9	4,06
MB	Fairford	CBWGT-2	2000	4000	7	**90**	3,60241	**1125**	6,1	3,01
MB	Fisher Branch	CBWGT	27400	50600	10	**167**	1,60216	**2590**	11,8	2,66
MB	Fisher Branch	CKYA-TV	31000	62000	8	**140**	1,415712	**5475**	8,9	3,01
MB	Flin Flon	CBWBT	7800	19200	10	**95**	1,105424	**660**	11,8	3,91

PROVINCE	CITY	CALL SIGN	ERPVAV (Watt)	ERPVPK (Watt)	CH	**Real Rad. Center(m)**	**System losses(dB)**	**Transmitter estimated operating power(Watt)**	**Closest Gain from Kathrein Catalog (dB)**	**Antenna Peak to Average Ratio(dB)**
MB	Flin Flon	CBWFT-2	68	200	3	**58**	0,4107257	**150**	-3	4,69
MB	Flin Flon	CKYF-TV	1040	2060	13	**64**	4,08141	**342**	8,9	2,97
MB	Foxwarren	CKX-TV-1	56800	111700	11	**197**	1,807872	**11000**	8,9	2,94
MB	Gods Lake Narrow	CBWXT	1200	5750	13	**32**	2,555316	**530**	6,1	6,80
MB	Grand Rapids	CBWHT	203	875	8	**69**	0,494824	**455**	-3	6,35
MB	Jackhead	CBWGT-1	3400	6400	5	**180**	1,257215	**700**	8,1	2,75
MB	Lac Du Bonnet	CBWT-2	8400	16800	4	**120**	0,7766	**1550**	8,1	3,01
MB	Leaf Rapids	CBWQT	260	1820	13	**101**	0,549348	**295**	0	8,45
MB	Little Grand Rapids	CBWZT	230	3440	9	**112**	0,568096	**523**	-3	11,75
MB	Mafeking	CBWYT	4000	15000	2	**113**	0,94613	**765**	8,1	5,74
MB	Manigotagan	CBWGT-3	151	250	22	**99**	3,8778	**86**	6,3	2,19
MB	Mccreary	CKX-TV-3	40360	78160	11	**34**	0,68368	**6050**	8,9	2,87
MB	Mccusker Lake	CBWUT	240	1620	10	**85**	0,521484	**545**	-3	8,29
MB	Melita	CKX-TV-2	188	188	9	**64**	0,486396	**420**	-3	0,00
MB	Minnedosa	CKND-TV-2	100000	100000	2	**378**	1,590616	**22200**	8,1	0,00
MB	Oak Lake	CBWFT-12	21500	27000	32	**127**	2,23461	**2100**	12,3	0,99
MB	Pine Falls	CBWFT-6	1500	7150	11	**117**	3,591872	**226**	11,8	6,78
MB	Piney	CBWT-3	25000	170000	29	**93**	1,79039	**2200**	12,3	8,33
MB	Portage La Prairie	CHMI-TV	195200	325000	13	**326**	2,694704	**23900**	11,8	2,21
MB	Ste Rose Du Lac	CBWFT-4	1209	3915	3	**41**	0,610865	**877**	2	5,10
MB	The Pas	CBWFT-1	68	200	6	**52**	0,4056444	**150**	-3	4,69
MB	The Pas	CBWIT	720	1220	7	**85**	0,522516	**549**	1,7	2,29
MB	The Pas	CKYP-TV	1070	2130	12	**50**	3,393566	**573**	6,1	2,99
MB	Thompson	CBWFT-5	72	213	5	**37**	0,3929828	**156**	-3	4,71
MB	Thompson	CBWTT	296	837	7	**67**	0,491212	**330**	0	4,51
MB	Thompson	CKYT-TV	1100	2185	9	**42**	2,786194	**512**	6,1	2,98
MB	Waasagomach	CBWWT	1700	8800	9	**40**	3,064972	**840**	6,1	7,14
MB	Winnipeg	CBWFT	59000	59000	3	**306**	1,363412	**12400**	8,1	0,00
MB	Winnipeg	CBWT	100000	100000	6	**306**	1,363412	**21000**	8,1	0,00
MB	Winnipeg	CIIT-TV	20000	20000	35	**250**	3,87982	**950**	17,1	0,00
MB	Winnipeg	CKND-TV	229300	325000	9	**274**	2,340384	**17400**	13,5	1,51
MB	Winnipeg	CKY-TV	325000	325000	7	**283**	2,402304	**24000**	13,5	0,00
NB	Allardville	CBAFT-3	53000	94000	3	**146**	0,859708	**9900**	8,1	2,49
NB	Bon Accord	CBAT-TV-1	54700	100000	6	**143**	0,850228	**10200**	8,1	2,62
NB	Campbellton	CBAFT-7	29000	100800	9	**53**	0,819904	**4500**	8,9	5,41
NB	Campbellton	CBAT-TV-4	13830	25120	4	**14**	0,442588	**9600**	2	2,59

PROVINCE	CITY	CALL SIGN	ERPVAV (Watt)	ERPVPK (Watt)	CH	Real Rad. Center(m)	System losses(dB)	Transmitter estimated operating power(Watt)	Closest Gain from Kathrein Catalog (dB)	Antenna Peak to Average Ratio(dB)
NB	Campbellton	CKCD-TV	920	1800	7	**66**	0,48846	**695**	1,7	2,91
NB	Chatham	CBAT-TV-3	7660	12760	6	**71**	0,622708	**2775**	5	2,22
NB	Edmundston	CBAFT-2	19500	37200	13	**149**	1,47832	**1800**	11,8	2,81
NB	Edmundston	CIMT-TV-1	1280	3160	4	**27**	0,54716	**910**	2	3,92
NB	Florenceville	CKLT-TV-1	19000	35000	3	**34**	0,50326	**6700**	5	2,65
NB	Fredericton	CBAFT-1	33750	60000	5	**71**	0,620812	**6000**	8,1	2,50
NB	Fredericton	CBAFT-10	4200	7800	19	**119**	2,66647	**910**	9,3	2,69
NB	Fredericton	CIHF-TV-1	9000	20000	11	**85**	1,035936	**1460**	8,9	3,47
NB	Miramichi City	CIHF-TV-13	24600	41700	40	**85**	1,68	**2125**	12,3	2,29
NB	Moncton	CBAFT	137700	325000	11	**123**	1,298752	**8200**	13,5	3,73
NB	Moncton	CBAT-TV-2	138900	325000	7	**138**	1,401264	**8500**	13,5	3,69
NB	Moncton	CIHF-TV-3	124700	232000	27	**110**	2,00984	**7700**	14,1	2,70
NB	Moncton	CKCW-TV	56000	100000	2	**108**	0,738364	**10200**	8,1	2,52
NB	Saint John	CBAT-TV	55000	100000	4	**44**	0,536124	**9600**	8,1	2,60
NB	Saint John	CIHF-TV-2	18300	35500	12	**22**	0,603184	**5125**	6,1	2,88
NB	Saint John	CKLT-TV	162000	325000	9	**74**	0,95888	**13300**	11,8	3,02
NB	St-Stephen	CIHF-TV-12	12700	31300	21	**85**	1,68	**1100**	12,3	3,92
NB	Upsalquitch	CKAM-TV	130000	230000	12	**227**	2,01496	**13600**	11,8	2,48
NB	Woodstock	CIHF-TV-11	21100	51900	38	**14**	0,7357	**5800**	6,3	3,91
NF	Argentia	CJOM-TV	6700	14000	3	**83**	0,658416	**2450**	5	3,20
NF	Baie Verte	CBNAT-1	8800	12200	3	**101**	0,715296	**6500**	2	1,42
NF	Bonavista	CJWB-TV	9900	17600	10	**49**	0,78688	**2900**	6,1	2,50
NF	Bonne Bay	CBYT-3	1848	5152	2	**61**	0,7034	**680**	5	4,45
NF	Carmanville	CBNAT-7	1900	14800	7	**60**	1,655754	**680**	6,1	8,92
NF	Clarenville	CBNT-10	350	700	7	**24**	0,417768	**385**	0	3,01
NF	Clarenville	CJCV-TV	70	211	11	**96**	0,54092	**158**	-3	4,79
NF	Conche	CBNAT-8	296	1200	12	**27**	0,42138	**326**	0	6,08
NF	Corner Brook	CBYT	10600	15700	5	**73**	0,627764	**3850**	5	1,71
NF	Corner Brook	CJWN-TV	6070	14750	10	**88**	1,05864	**510**	11,8	3,86
NF	Cow Head	CBYT-6	4337	11850	8	**60**	1,242856	**1415**	6,1	4,37
NF	Deer Lake	CBYAT	1030	1840	12	**63**	2,709554	**247**	8,9	2,52
NF	Deer Lake	CJLW-TV	480	2500	8	**55**	0,4704	**500**	0	7,17
NF	Fox Harbour	CBNAT-10	10000	34500	7	**58**	0,851552	**2975**	6,1	5,38
NF	Goose Bay	CFLA-TV	1930	9630	8	**50**	3,313094	**1010**	6,1	6,98
NF	Goose Bay	CHTG-TV	963	4800	12	**50**	0,462316	**720**	1,7	6,98
NF	Grand Bank	CJOX-TV-1	4670	9260	2	**82**	0,802445	**1760**	5	2,97

PROVINCE	CITY	CALL SIGN	ERPVAV (Watt)	ERPVPK (Watt)	CH	Real Rad. Center(m)	System losses(dB)	Transmitter estimated operating power(Watt)	Closest Gain from Kathrein Catalog (dB)	Antenna Peak to Average Ratio(dB)
NF	Grand Falls	CBNAT	317000	317000	11	**171**	1,627616	**20500**	13,5	0,00
NF	Grand Falls	CJCN-TV	55000	100000	4	**102**	0,71972	**10000**	8,1	2,60
NF	Hampden	CBNAT-23	153	662	13	**26**	0,420348	**339**	-3	6,36
NF	Hawke's Bay	CBYT-9	1100	4800	4	**18**	0,504845	**778**	2	6,40
NF	Hermitage	CBNT-24	6480	50000	4	**20**	0,461864	**4500**	2	8,87
NF	Labrador City	CBFT-12	214	1340	11	**29**	0,42568	**470**	-3	7,97
NF	Labrador City	CBNLT	214	1340	13	**29**	0,42568	**470**	-3	7,97
NF	Marystown	CBNT-3	50800	96200	5	**89**	0,677692	**6050**	9,9	2,77
NF	Marystown	CJMA-TV	900	1800	11	**65**	0,48674	**680**	1,7	3,01
NF	Millertown	CBNAT-5	83	690	9	**69**	0,493792	**185**	-3	9,20
NF	Mt St Margaret	CBNAT-9	29000	46250	9	**98**	1,124	**4800**	8,9	2,03
NF	Musgrave Harbour	CBNAT-11	909	4420	9	**21**	0,412436	**675**	1,7	6,87
NF	Placentia	CBNT-2	10600	18200	12	**81**	1,011856	**1710**	8,9	2,35
NF	Port Au Port	CBFNT	15000	61400	13	**35**	0,694688	**4275**	6,1	6,12
NF	Port Aux Basques	CBYT-4	470	840	3	**54**	0,4071438	**500**	0	2,52
NF	Port Rexton	CBNT-1	16000	32000	13	**155**	1,518224	**2900**	8,9	3,01
NF	Portland Creek	CBYT-8	1944	10332	13	**23**	2,177864	**785**	6,1	7,25
NF	Ramea	CBNT-25	1283	7450	13	**18**	1,109694	**405**	6,1	7,64
NF	Red Rocks	CJRR-TV	400	805	11	**80**	0,51254	**455**	0	3,04
NF	Roddickton	CBNAT-22	850	2140	11	**58**	0,475388	**640**	1,7	4,01
NF	Rose Blanche	CBYT-11	103	284	9	**15**	0,401944	**225**	-3	4,40
NF	Springdale	CBNAT-13	290	519	13	**23**	0,415188	**320**	0	2,53
NF	St Alban's	CBNT-4	468	2400	9	**40**	0,443912	**520**	0	7,10
NF	St Andrew's	CBYT-5	515	1000	6	**52**	0,4058943	**356**	2	2,88
NF	St Anthony	CBNAT-4	6540	12740	6	**93**	0,69128	**1175**	8,1	2,90
NF	St John's	CBFJ-TV	75	291	4	**76**	0,4259696	**165**	-3	5,89
NF	St John's	CBNT	196000	356000	8	**104**	1,165968	**16800**	11,8	2,59
NF	St John's	CJON-TV	76000	212800	6	**91**	0,686224	**13700**	8,1	4,47
NF	St Mary's	CBNT-6	670	2720	10	**88**	0,527848	**510**	1,7	6,08
NF	St Vincent's	CBNT-26	4537	12814	7	**57**	1,968062	**1750**	6,1	4,51
NF	Stephenville	CBYT-1	12010	48230	8	**44**	0,757296	**3475**	6,1	6,04
NF	Stephenville	CJSV-TV	4650	8340	4	**28**	0,54995	**3300**	2	2,54
NF	Sunnyside	CBNT-41	416	1600	9	**29**	0,425508	**461**	0	5,85
NF	Trepassey	CBNT-39	122	423	4	**17**	0,3764061	**265**	-3	5,40
NF	Wesleyville	CBNT-9	204	754	5	**46**	0,4005631	**446**	-3	5,68
NS	Antigonish	CIHF-TV-15	13400	37800	21	**68**	1,4539	**1100**	12,3	4,50

PROVINCE	CITY	CALL SIGN	ERPVAV (Watt)	ERPVPK (Watt)	CH	**Real Rad. Center(m)**	**System losses(dB)**	**Transmitter estimated operating power(Watt)**	**Closest Gain from Kathrein Catalog (dB)**	**Antenna Peak to Average Ratio(dB)**
NS	Antigonish	CJCB-TV-2	140000	260000	9	**141**	1,423968	**12800**	11,8	2,69
NS	Aspen	CBHT-14	95	442	5	**107**	0,4512928	**210**	-3	6,68
NS	Bridgewater	CIHF-TV-6	6670	13900	9	**100**	1,1412	**570**	11,8	3,19
NS	Caledonia	CBHT-9	226	609	2	**34**	0,3904005	**495**	-3	4,31
NS	Caledonia	CJCH-TV-6	51500	100000	6	**143**	0,848332	**9600**	8,1	2,88
NS	Canning	CJCH-TV-1	9050	18100	10	**97**	1,119872	**1500**	8,9	3,01
NS	Cheticamp	CBHFT-4	7900	16700	10	**103**	1,163904	**675**	11,8	3,25
NS	Cheticamp	CBIT-2	2470	7350	2	**46**	0,632255	**1800**	2	4,74
NS	Digby	CBHFT-6	3140	9050	58	**113**	2,55921	**1200**	6,3	4,60
NS	Digby	CBHT-7	3140	9050	52	**119**	2,6682	**1350**	6,3	4,60
NS	Dingwall	CBIT-16	48	137	12	**18**	0,407104	**105**	-3	4,55
NS	Halifax	CBHFT	1290	3860	13	**204**	3,618696	**728**	6,1	4,76
NS	Halifax	CBHT	56000	100000	3	**195**	1,0136	**10900**	8,1	2,52
NS	Halifax	CIHF-TV	8190	20000	8	**166**	1,59528	**775**	11,8	3,88
NS	Halifax	CJCH-TV	60000	100000	5	**182**	0,97094	**11500**	8,1	2,22
NS	Inverness	CBIT-19	730	1600	8	**59**	0,477968	**550**	1,7	3,41
NS	Inverness	CJCB-TV-1	9400	9400	6	**36**	0,51116	**6600**	2	0,00
NS	Isle Madame	CIMC-TV	450	1200	10	**39**	0,44288	**499**	0	4,26
NS	Liverpool	CBHT-1	1127	1952	12	**144**	2,6013	**262**	8,9	2,39
NS	Middleton	CBHFT-5	120000	210000	46	**104**	1,92738	**7200**	14,1	2,43
NS	Middleton	CBHT-6	17200	42400	8	**94**	1,102672	**2850**	8,9	3,92
NS	Mulgrave	CBHFT-2	106000	258000	7	**137**	1,395072	**9600**	11,8	3,86
NS	Mulgrave	CBHT-11	129000	258000	12	**120**	1,280864	**11400**	11,8	3,01
NS	Mulgrave	CIHF-TV-16	1410	2650	28	**60**	1,6475	**482**	6,3	2,74
NS	New Glasgow	CBHFT-7	6400	19000	15	**79**	1,60286	**1080**	9,3	4,73
NS	New Glasgow	CBHT-5	479	857	4	**69**	0,4195555	**500**	0	2,53
NS	New Glasgow	CIHF-TV-8	12100	18800	34	**94**	1,79571	**1075**	12,3	1,91
NS	Port Hawkesbury	CJCB-TV-6	5600	15000	3	**69**	0,73874	**2080**	5	4,28
NS	Sheet Harbour	CBHT-4	9070	17800	11	**74**	0,96232	**1450**	8,9	2,93
NS	Sheet Harbour	CJCH-TV-5	480	1500	2	**40**	0,3954818	**500**	0	4,95
NS	Shelburne	CBHT-2	8400	37800	7	**88**	1,061392	**1375**	8,9	6,53
NS	Shelburne	CIHF-TV-9	1800	3900	10	**87**	1,792748	**665**	6,1	3,36
NS	Sydney	CBHFT-3	4500	8900	13	**119**	2,3618	**990**	8,9	2,96
NS	Sydney	CBIT	54000	100000	5	**104**	0,726672	**9800**	8,1	2,68
NS	Sydney	CIHF-TV-7	52800	154100	11	**99**	1,132256	**8800**	8,9	4,65
NS	Sydney	CJCB-TV	100000	180000	4	**68**	0,611964	**17800**	8,1	2,55

PROVINCE	CITY	CALL SIGN	ERPVAV (Watt)	ERPVPK (Watt)	CH	**Real Rad. Center(m)**	**System losses(dB)**	**Transmitter estimated operating power(Watt)**	**Closest Gain from Kathrein Catalog (dB)**	**Antenna Peak to Average Ratio(dB)**
NS	Truro	CBHT-8	5500	13900	55	**86**	2,09038	**1035**	9,3	4,03
NS	Truro	CIHF-TV-4	6000	17900	18	**100**	1,8795	**1075**	9,3	4,75
NS	Wolfville	CIHF-TV-5	134000	336000	20	**100**	1,8795	**12100**	12,3	3,99
NS	Yarmouth	CBHFT-1	19500	38250	3	**143**	0,850228	**3650**	8,1	2,93
NS	Yarmouth	CBHT-3	15700	38400	11	**165**	1,58496	**2900**	8,9	3,88
NS	Yarmouth	CIHF-TV-10	23600	66400	45	**144**	**2,46071**	**1600**	**14,1**	**4,49**
NS	Yarmouth	CJCH-TV-7	12000	33000	40	**98**	**1,8529**	**1075**	**12,3**	**4,39**
NT	Fort Providence	CBEBT-3	400	2080	13	**27**	**0,422928**	**440**	**0**	**7,16**
NT	Hay River	CBEBT-1	540	2565	7	**57**	**0,473324**	**410**	**1,7**	**6,77**
NT	Inuvik	CHAK-TV	122	236	6	**107**	**0,4517093**	**270**	**-3**	**2,87**
NT	Rae-Edzo	CFYK-TV-1	72	340	10	**29**	**0,42568**	**160**	**-3**	**6,74**
NT	Yellowknife	CFYK-TV	2400	4200	8	**58**	**2,656864**	**1075**	**6,1**	**2,43**
NT	Yellowknife	CH4127	385	735	13	**50**	**0,462316**	**430**	**0**	**2,81**
NT	Yellowknife	CHTY-TV	385	735	11	**50**	**0,462316**	**430**	**0**	**2,81**
NU	Cape Dorset	CBEJT	216	680	9	**17**	0,404524	**475**	-3	4,98
ON	Atikokan	CBWCT-1	2800	5600	7	**94**	5,368962	**1230**	8,9	3,01
ON	Bancroft	CIII-TV-2	100000	100000	2	**292**	1,31854	**20800**	8,1	0,00
ON	Barrie	CBLFT-11	7700	14700	55	**137**	2,37426	**515**	14,1	2,81
ON	Barrie	CBLT-TV-1	180000	1000000	16	**224**	3,52737	**15600**	14,1	7,45
ON	Barrie	CKVR-TV	100000	100000	3	**289**	1,31064	**20800**	8,1	0,00
ON	Barry's Bay	CBOT-2	2900	8600	19	**122**	2,71837	**635**	9,3	4,72
ON	Belleville	CBLFT-13	216000	410000	15	**152**	2,57642	**15000**	14,1	2,78
ON	Belleville	CICO-TV-53	67000	143200	53	**167**	2,7706	**7400**	12,3	3,30
ON	Brighton	CKWS-TV-1	8700	22400	66	**70**	1,4805	**720**	12,3	4,11
ON	Chapleau	CBCU-TV	959	3996	7	**78**	0,50996	**725**	1,7	6,20
ON	Chapleau	CBLFT-22	487	2450	13	**41**	0,446492	**500**	0	7,02
ON	Chapleau	CITO-TV-4	375	1550	9	**81**	0,515808	**420**	0	6,16
ON	Chatham	CBLFT-10	15200	40600	48	**194**	3,12305	**1825**	12,3	4,27
ON	Chatham	CBLN-TV-3	2000	10520	64	**192**	3,9311	**580**	9,3	7,21
ON	Chatham	CICO-TV-59	37200	37200	59	**219**	3,46087	**4820**	12,3	0,00
ON	Cloyne	CICO-TV-92	58070	118570	55	**145**	2,48066	**3975**	14,1	3,10
ON	Cornwall	CJOH-TV-8	130000	260000	8	**195**	1,79136	**12900**	11,8	3,01
ON	Deseronto	CJOH-TV-6	55500	100000	6	**163**	0,912796	**10500**	8,1	2,56
ON	Dryden	CBWFT-9	11300	19600	6	**134**	0,821156	**2100**	8,1	2,39
ON	Elliot Lake	CBEC-TV	34000	67900	7	**57**	0,847424	**2700**	11,8	3,00
ON	Elliot Lake	CBLFT-6	18600	37000	12	**44**	0,757296	**5375**	6,1	2,99

PROVINCE	CITY	CALL SIGN	ERPVAV (Watt)	ERPVPK (Watt)	CH	Real Rad. Center(m)	System losses(dB)	Transmitter estimated operating power(Watt)	Closest Gain from Kathrein Catalog (dB)	Antenna Peak to Average Ratio(dB)
ON	Elliot Lake	CICI-TV-1	19000	19000	3	**72**	0,62492	**6900**	5	0,00
ON	Fort Erie	CIII-TV-55	14200	47000	55	**115**	2,079	**890**	14,1	5,20
ON	Fort Frances	CBWCT	50500	95800	5	**159**	0,899208	**9600**	8,1	2,78
ON	Fort Frances	CBWFT-11	12500	59900	15	**160**	2,67484	**900**	14,1	6,81
ON	Foymount	CBOT-1	29000	66700	59	**39**	1,06155	**2175**	12,3	3,62
ON	Geraldton	CBLFT-26	2300	3400	7	**187**	5,49446	**535**	11,8	1,70
ON	Geraldton	CBLGT	22000	43000	13	**165**	1,585648	**2075**	11,8	2,91
ON	Gogama	CBLFT-21	468	2360	12	**119**	0,579792	**530**	0	7,03
ON	Hamilton	CHCH-TV	230000	325000	11	**321**	2,66168	**18900**	13,5	1,50
ON	Hamilton	CITS-TV	479000	1028000	36	**295**	2,5045	**16500**	17,1	3,32
ON	Hamilton	CKXT-TV-1	10000	19000	45	**150**	2,5445	**1050**	12,3	2,79
ON	Hawkesbury	CHLF-TV-2	7500	10000	39	**51**	1,22248	**1160**	9,3	1,25
ON	Hawkesbury	CICO-TV-96	7330	10000	48	**51**	1,22248	**1135**	9,3	1,35
ON	Hearst	CBCC-TV	5319	8110	5	**119**	0,972635	**1025**	8,1	1,83
ON	Hearst	CBLFT-5	8400	16800	7	**159**	1,54368	**790**	11,8	3,01
ON	Hearst	CITO-TV-3	3320	7110	4	**137**	1,05773	**655**	8,1	3,31
ON	Huntsville	CBLT-TV-2	43000	145000	8	**160**	1,554	**4050**	11,8	5,28
ON	Huntsville	CICA-TV-13	16000	31900	13	**174**	1,652384	**3000**	8,9	3,00
ON	Huntsville	CKNY-TV-11	178900	325000	11	**175**	1,6572	**17200**	11,8	2,59
ON	Kapuskasing	CBLFT-4	17400	30000	12	**130**	1,346224	**3050**	8,9	2,37
ON	Kapuskasing	CBLT-9	984	4600	2	**125**	0,46662	**345**	5	6,70
ON	Kapuskasing	CITO-TV-1	3500	17500	10	**107**	3,582292	**525**	11,8	6,99
ON	Kearns	CBLT-8	38500	70000	2	**122**	0,782604	**7100**	8,1	2,60
ON	Kearns	CITO-TV-2	162500	325000	11	**121**	1,283616	**14300**	11,8	3,01
ON	Kenora	CBWAT	8000	16000	8	**113**	1,229264	**700**	11,8	3,01
ON	Kenora	CBWFT-7	3800	6800	2	**100**	0,88475	**720**	8,1	2,53
ON	Kenora	CICO-TV-91	61800	123030	44	**143**	2,4514	**4200**	14,1	2,99
ON	Kenora	CJBN-TV	178	178	13	**63**	0,4833	**400**	-3	0,00
ON	Kingston	CBLFT-14	57500	109000	32	**137**	2,37426	**3850**	14,1	2,78
ON	Kingston	CICO-TV-38	76740	171790	38	**148**	2,51524	**5300**	14,1	3,50
ON	Kingston	CKWS-TV	162000	325000	11	**295**	2,480048	**18900**	11,8	3,02
ON	Kitchener	CBLFT-8	204200	388500	61	**178**	2,92222	**15500**	14,1	2,79
ON	Kitchener	CBLN-TV-1	130170	1041000	56	**235**	3,67101	**11700**	14,1	9,03
ON	Kitchener	CICO-TV-28	128000	210000	28	**276**	4,21365	**13000**	14,1	2,15
ON	Kitchener	CKCO-TV	325000	325000	13	**201**	1,833328	**22000**	13,5	0,00

PROVINCE	CITY	CALL SIGN	ERPVAV (Watt)	ERPVPK (Watt)	CH	**Real Rad. Center(m)**	**System losses(dB)**	**Transmitter estimated operating power(Watt)**	**Closest Gain from Kathrein Catalog (dB)**	**Antenna Peak to Average Ratio(dB)**
ON	Little Current	CBCE-TV	23700	59200	16	**147**	2,5046	**815**	17,1	3,98
ON	London	CBLFT-9	38400	72000	53	**280**	4,26685	**6000**	12,3	2,73
ON	London	CBLN-TV	1000000	1678000	40	**241**	2,235246	**31000**	17,1	2,25
ON	London	CFMT-TV-1	729500	1127200	69	**175**	1,752511	**21000**	17,1	1,89
ON	London	CFPL-TV	325000	325000	10	**288**	2,436704	**19000**	14,7	0,00
ON	London	CHCH-TV-2	783000	1300000	51	**298**	2,658284	**28000**	17,1	2,20
ON	London	CICO-TV-18	38300	38300	18	**292**	4,42645	**6200**	12,3	0,00
ON	London	CITS-TV-2	2600	4400	14	**245**	4,84627	**465**	12,3	2,28
ON	London	CJMT-TV-1	18800	25000	20	**175**	2,88099	**710**	17,1	1,24
ON	Manitouwadge	CBLAT-1	22000	40000	8	**164**	1,58152	**2075**	11,8	2,60
ON	Manitouwadge	CBLFT-25	9800	55400	15	**182**	2,9701	**1140**	12,3	7,52
ON	Marathon	CBLAT-4	7660	18730	11	**95**	1,109552	**650**	11,8	3,88
ON	Mattawa	CBLFT-27	2800	16700	26	**130**	2,86196	**635**	9,3	7,76
ON	Maynooth	CBOT-4	1277	1535	51	**35**	1,215	**198**	9,3	0,80
ON	Mcarthur's Mills	CBOT-5	1429	4286	33	**66**	1,74265	**500**	6,3	4,77
ON	Mcarthur's Mills	CICO-TV-93	70300	140600	42	**90**	1,74118	**6200**	9,3	3,01
ON	Midland	CIII-TV-7	174700	325000	7	**351**	2,865328	**22100**	11,8	2,70
ON	Muskoka	CHCH-TV-3	757000	2572000	67	**305**	2,7084	**27000**	17,1	5,31
ON	Nipigon	CBLFT-19	2300	4300	26	**94**	2,24262	**900**	6,3	2,72
ON	Nipigon	CBLK-TV	2300	4300	16	**94**	2,24262	**900**	6,3	2,72
ON	Normandale	CBLN-TV-6	3497	5859	44	**84**	2,05405	**655**	9,3	2,24
ON	North Bay	CBLT-4	60800	100000	4	**159**	0,901104	**11500**	8,1	2,16
ON	North Bay	CFGC-TV-2	3400	3400	2	**113**	0,9452	**650**	8,1	0,00
ON	North Bay	CHCH-TV-6	5000	5000	32	**116**	2,6163	**1070**	9,3	0,00
ON	North Bay	CICA-TV-6	57000	95000	6	**140**	0,840432	**10700**	8,1	2,22
ON	North Bay	CKNY-TV	70500	132600	10	**122**	1,291872	**12100**	8,9	2,74
ON	Orillia	CFTO-TV-21	207600	207600	21	**162**	2,70543	**15000**	14,1	0,00
ON	Oshawa	CHEX-TV-2	2445	5500	22	**96**	2,26165	**960**	6,3	3,52
ON	Ottawa	CBOFT	128000	252000	9	**214**	1,92552	**13100**	11,8	2,94
ON	Ottawa	CBOT	100000	100000	4	**187**	0,98674	**19300**	8,1	0,00
ON	Ottawa	CFMT-TV-2	626000	1275000	60	**202**	1,94929	**19000**	17,1	3,09
ON	Ottawa	CHCH-TV-1	25000	60000	11	**190**	1,758336	**2450**	11,8	3,80
ON	Ottawa	CHRO-TV-43	282000	562000	43	**177**	1,682315	**15000**	14,1	2,99
ON	Ottawa	CICO-TV-24	427600	778200	24	**122**	1,301455	**11100**	17,1	2,60
ON	Ottawa	CIII-TV-6	8700	50000	6	**46**	0,543392	**3100**	5	7,59

PROVINCE	CITY	CALL SIGN	ERPVAV (Watt)	ERPVPK (Watt)	CH	**Real Rad. Center(m)**	**System losses(dB)**	**Transmitter estimated operating power(Watt)**	**Closest Gain from Kathrein Catalog (dB)**	**Antenna Peak to Average Ratio(dB)**
ON	Ottawa	CITS-TV-1	26000	55000	32	**202**	3,2361	**2125**	14,1	3,25
ON	Ottawa	CITY-TV-3	500000	500000	65	**215**	1,949195	**15000**	17,1	0,00
ON	Ottawa	CJMT-TV-2	308000	595000	14	**202**	1,85815	**9200**	17,1	2,86
ON	Ottawa	CJOH-TV	178000	325000	13	**163**	1,5712	**16700**	11,8	2,61
ON	Owen Sound	CICA-TV-12	52000	125000	12	**132**	1,359296	**9100**	8,9	3,81
ON	Owen Sound	CIII-TV-4	20600	37000	4	**136**	0,826844	**3850**	8,1	2,54
ON	Paris	CIII-TV	100000	100000	6	**298**	1,340344	**20900**	8,1	0,00
ON	Parry Sound	CICE-TV-11	6110	7570	42	**101**	1,88881	**1100**	9,3	0,93
ON	Pembroke	CBOT-6	17430	43300	3	**182**	0,972836	**3350**	8,1	3,95
ON	Pembroke	CHLF-TV-13	58100	113800	17	**190**	3,08049	**4550**	14,1	2,92
ON	Pembroke	CHRO-TV	100000	100000	5	**165**	0,919432	**19000**	8,1	0,00
ON	Pembroke	CICE-TV-16	60300	119400	29	**190**	3,08049	**4750**	14,1	2,97
ON	Pembroke	CJOH-TV-47	259000	492000	47	**128**	1,8372	**15200**	14,1	2,79
ON	Penetanguishene	CBLFT-15	11800	17400	34	**78**	1,58291	**1000**	12,3	1,69
ON	Penetanguishene	CICA-TV-51	77600	136800	51	**81**	1,62414	**4350**	14,1	2,46
ON	Peterborough	CBLFT-12	58600	111000	44	**183**	2,98207	**4500**	14,1	2,77
ON	Peterborough	CFTO-TV-54	223200	223200	54	**160**	2,67085	**15900**	14,1	0,00
ON	Peterborough	CHEX-TV	86500	185000	12	**315**	2,619024	**10400**	11,8	3,30
ON	Peterborough	CICO-TV-74	234420	781620	18	**200**	3,20817	**19000**	14,1	5,23
ON	Peterborough	CIII-TV-27	1130000	2535000	27	**140**	1,494561	**31000**	17,1	3,51
ON	Prescott	CKWS-TV-2	4424	7200	26	**113**	2,56094	**935**	9,3	2,12
ON	Red Lake	CBWET	570	1135	10	**64**	0,486396	**430**	1,7	2,99
ON	Sarnia	CBLN-TV-2	10000	10000	34	**126**	2,21998	**975**	12,3	0,00
ON	Sarnia	CKCO-TV-3	609000	846000	42	**297**	2,645755	**21700**	17,1	1,43
ON	Sarnia-Oil Springs	CBLFT-17	41300	60000	68	**126**	2,21998	**4050**	12,3	1,62
ON	Sarnia-Oil Springs	CIII-TV-29	162000	370000	29	**205**	3,27733	**13300**	14,1	3,59
ON	Sault Ste Marie	CBLFT-20	1200	3600	26	**109**	2,49693	**499**	6,3	4,77
ON	Sault Ste Marie	CBLT-5	37900	75700	5	**142**	0,845172	**7100**	8,1	3,00
ON	Sault Ste Marie	CHBX-TV	100000	100000	2	**142**	0,845172	**18800**	8,1	0,00
ON	Sault Ste Marie	CHCH-TV-5	5000	5000	38	**79**	1,97966	**925**	9,3	0,00
ON	Sault Ste Marie	CICO-TV-20	2900	6100	20	**157**	3,3256	**730**	9,3	3,23
ON	Sault Ste Marie	CIII-TV-12	1800	5000	12	**102**	4,317078	**625**	8,9	4,44
ON	Sioux Lookout	CBWDT-1	30000	72000	12	163	1,577392	2850	11,8	3,80
ON	Smiths Falls	CKWS-TV-3	10000	10000	36	**94**	1,80103	**890**	12,3	0,00
ON	Stevenson	CIII-TV-22	195700	1022000	22	**114**	2,06038	**12200**	14,1	7,18

PROVINCE	CITY	CALL SIGN	ERPVAV (Watt)	ERPVPK (Watt)	CH	Real Rad. Center(m)	System losses(dB)	Transmitter estimated operating power(Watt)	Closest Gain from Kathrein Catalog (dB)	Antenna Peak to Average Ratio(dB)
ON	Sturgeon Falls	CBLFT-1	9750	17500	7	**156**	1,529232	**910**	11,8	2,54
ON	Sudbury	CBLFT-2	8600	17100	13	**81**	1,008416	**1390**	8,9	2,98
ON	Sudbury	CBLT-6	115500	198100	9	**194**	1,78792	**11500**	11,8	2,34
ON	Sudbury	CFGC-TV	25000	25000	11	**101**	1,14464	**4150**	8,9	0,00
ON	Sudbury	CHCH-TV-4	19200	35000	41	**152**	2,56445	**1340**	14,1	2,61
ON	Sudbury	CHLF-TV-1	182400	282500	25	**152**	2,56445	**12800**	14,1	1,90
ON	Sudbury	CICI-TV	100000	100000	5	**297**	1,336552	**20900**	8,1	0,00
ON	Sudbury	CICO-TV-19	196200	285000	19	**152**	2,56445	**13700**	14,1	1,62
ON	Temagami	CBCQ-TV-1	14200	28800	15	**94**	1,79438	**830**	14,1	3,07
ON	Thunder Bay	CBLFT-18	22700	22700	12	**159**	1,547808	**2125**	11,8	0,00
ON	Thunder Bay	CHFD-TV	56000	56000	4	**199**	1,024976	**10900**	8,1	0,00
ON	Thunder Bay	CICO-TV-9	32100	32100	9	**159**	1,547808	**3000**	11,8	0,00
ON	Thunder Bay	CKPR-TV	56000	56000	2	**199**	1,024976	**10900**	8,1	0,00
ON	Timmins	CBLFT-3	16000	30000	9	**160**	1,556064	**2925**	8,9	2,73
ON	Timmins	CBLT-7	100000	100000	6	**171**	0,936812	**19000**	8,1	0,00
ON	Timmins	CHCH-TV-7	1500	3300	11	**82**	4,47898	**536**	8,9	3,42
ON	Timmins	CICA-TV-7	83900	141300	7	**138**	1,401264	**14800**	8,9	2,26
ON	Timmins	CIII-TV-13	11600	25000	13	**122**	1,291872	**2000**	8,9	3,33
ON	Timmins	CITO-TV	72400	100000	3	**144**	0,851492	**13500**	8,1	1,40
ON	Toronto	CBLFT	615600	615600	25	**516**	4,261996	**24200**	18,3	0,00
ON	Toronto	CBLT	84000	100000	5	**488**	1,940428	**20200**	8,1	0,76
ON	Toronto	CFMT-TV	1138000	1138000	47	**526**	4,337907	**45600**	18,3	0,00
ON	Toronto	CFTO-TV	280000	325000	9	**492**	3,835408	**22500**	14,7	0,65
ON	Toronto	CICA-TV	1288200	1737800	19	**516**	4,261996	**50500**	18,3	1,30
ON	Toronto	CIII-TV-41	732000	732000	41	**526**	4,337907	**29300**	18,3	0,00
ON	Toronto	CITY-TV	192000	310000	57	**540**	7,72884	**16700**	18,3	2,08
ON	Toronto	CJMT-TV	500000	500000	69	**337**	2,7964	**18500**	17,1	0,00
ON	Toronto	CKXT-TV	30000	30000	52	**483**	6,97074	**2900**	17,1	0,00
ON	Wawa	CBLAT-3	16000	32000	9	**120**	1,281552	**2750**	8,9	3,01
ON	Wawa	CBLFT-23	5300	14800	16	**91**	2,19072	**1025**	9,3	4,46
ON	Wawa	CHBX-TV-1	33000	66400	7	**101**	1,145328	**2825**	11,8	3,04
ON	Wheatley	CHWI-TV	183000	492000	16	**163**	2,71873	**13300**	14,1	4,30
ON	White River	CBLAT-2	384	940	12	**106**	0,557948	**441**	0	3,89
ON	Wiarton	CBLN-TV-5	240000	760000	20	**163**	2,71873	**17200**	14,1	5,01
ON	Wiarton	CKCO-TV-2	100000	100000	2	**220**	1,0926	**19800**	8,1	0,00

PROVINCE	CITY	CALL SIGN	ERPVAV (Watt)	ERPVPK (Watt)	CH	**Real Rad. Center(m)**	**System losses(dB)**	**Transmitter estimated operating power(Watt)**	**Closest Gain from Kathrein Catalog (dB)**	**Antenna Peak to Average Ratio(dB)**
ON	Windsor	CBEFT	62700	144000	54	**205**	3,27334	**5150**	14,1	3,61
ON	Windsor	CBET	80700	201000	9	**191**	1,764528	**15500**	8,9	3,96
ON	Windsor	CHWI-TV-60	5800	32000	60	**94**	2,2357	**1135**	9,3	7,42
ON	Windsor	CICO-TV-32	217600	217600	32	**214**	3,39969	**18500**	14,1	0,00
ON	Wingham	CBLN-TV-4	828000	828000	45	**193**	1,882223	**24500**	17,1	0,00
ON	Wingham	CKNX-TV	150000	260000	8	**190**	1,759712	**14800**	11,8	2,39
ON	Woodstock	CITY-TV-2	929000	929000	31	**238**	2,212399	**30000**	17,1	0,00
PE	Charlottetown	CBAFT-5	100000	280000	31	**156**	2,61765	**7100**	14,1	4,47
PE	Charlottetown	CBCT	179000	325000	13	**208**	1,885616	**9700**	13,5	2,59
PE	Charlottetown	CIHF-TV-14	24500	38100	42	**85**	1,68	**2100**	12,3	1,92
PE	Charlottetown	CKCW-TV-1	14500	29000	8	**82**	1,01736	**4450**	6,1	3,01
PE	Elmira	CBCT-2	462	1830	11	**52**	0,464896	**520**	0	5,98
PE	St Edward	CBAFT-6	100	240	9	**46**	0,454404	**220**	-3	3,80
PE	St Edward	CBCT-1	258	1032	4	**50**	0,4043116	**280**	0	6,02
PE	St Edward	CKCW-TV-2	470	1100	5	**65**	0,4163068	**510**	0	3,69
QC	Aguanish	CBST-7	326	1587	8	**23**	0,415188	**360**	0	6,87
QC	Alma	CBJET-1	4000	4000	32	**32**	1,15618	**610**	9,3	0,00
QC	Baie-Comeau	CBMIT	4500	10950	28	**61**	1,6648	**775**	9,3	3,86
QC	Baie-Comeau	CBST-19	1590	3950	7	**55**	2,04566	**625**	6,1	3,95
QC	Baie-Comeau	CFTF-TV-5	940	6600	9	**40**	0,4446	**700**	1,7	8,46
QC	Baie-Trinite	CIVF-TV	58900	155000	12	**84**	1,029744	**9600**	8,9	4,20
QC	Bearn/Fabre	CKRN-TV-3	1733	3640	3	**34**	0,575525	**1235**	2	3,22
QC	Beauceville	CBVT-6	3840	10000	6	**114**	0,951245	**740**	8,1	4,16
QC	Blanc-Sablon	CBMST	150	930	5	**85**	0,4333	**330**	-3	7,92
QC	Blanc-Sablon	CBST-17	150	930	3	**85**	0,4335499	**330**	-3	7,92
QC	Carleton	CBGAT-14	32000	100000	2	**69**	0,61386	**5600**	8,1	4,95
QC	Carleton	CFTF-TV-11	50400	126100	44	**25**	0,882	**3600**	12,3	3,98
QC	Carleton	CHAU-TV	46200	81700	5	**99**	0,711504	**8400**	8,1	2,48
QC	Carleton	CIVK-TV	428200	1061700	15	**59**	0,86152	**10100**	17,1	3,94
QC	Chandler	CBGAT-15	184	465	8	**52**	0,464896	**410**	-3	4,03
QC	Chandler	CBVB-TV	1660	3090	23	**58**	1,61117	**560**	6,3	2,70
QC	Chandler	CHAU-TV-4	26	55	6	**42**	0,3978142	**57**	-3	3,25
QC	Chapeau	CBOFT-1	550	4750	11	**122**	0,585468	**425**	1,7	9,36
QC	Chapeau	CIVP-TV	3120	8650	23	**110**	2,51769	**650**	9,3	4,43
QC	Chibougamau	CBFAT	575	575	5	**63**	0,4153072	**399**	2	0,00

PROVINCE	CITY	CALL SIGN	ERPVAV (Watt)	ERPVPK (Watt)	CH	**Real Rad. Center(m)**	**System losses(dB)**	**Transmitter estimated operating power(Watt)**	**Closest Gain from Kathrein Catalog (dB)**	**Antenna Peak to Average Ratio(dB)**
QC	Chibougamau	CBMCT	238	238	4	**54**	0,407477	**521**	-3	0,00
QC	Chicoutimi	CBJET	10000	12000	58	**162**	2,69745	**1090**	12,3	0,79
QC	Chicoutimi	CIVV-TV	165700	325000	8	**164**	1,578768	**15700**	11,8	2,93
QC	Chicoutimi	CJPM-TV	61000	100000	6	**58**	0,580364	**10700**	8,1	2,15
QC	Cloridorme	CBGAT-16	85	239	8	**35**	0,436	**187**	-3	4,49
QC	Cloridorme	CHAU-TV-8	89	200	11	**35**	0,436	**195**	-3	3,52
QC	Escuminac	CBVA-TV	5210	9950	18	**43**	1,34821	**830**	9,3	2,81
QC	Fermont	CBFT-13	20	100	7	**41**	0,44546	**44**	-3	6,99
QC	Fermont	CBMRT	18	89	9	**48**	0,458704	**40**	-3	6,94
QC	Forestville	CFTF-TV-4	1100	7500	4	**45**	0,629	**801**	2	8,34
QC	Gascons	CIVK-TV-1	516000	1390000	32	**114**	1,248635	**13200**	17,1	4,30
QC	Gaspe	CBGAT-17	1800	5600	9	**89**	4,642798	**670**	8,9	4,93
QC	Gaspe	CBVG-TV	5000	10100	18	**94**	2,24262	**975**	9,3	3,05
QC	Gaspe	CHAU-TV-6	378	378	7	**31**	0,42826	**420**	0	0,00
QC	Gaspe	CIVK-TV-3	3680	8430	35	**94**	2,24262	**720**	9,3	3,60
QC	Grande-Vallee	CBGAT-3	587	2275	6	**88**	0,4361322	**409**	2	5,88
QC	Grand-Fonds	CIVB-TV-1	242900	686250	31	**82**	1,64143	**20500**	12,3	4,51
QC	Harrington-Harbour	CBMUT	129	244	13	**38**	0,441332	**285**	-3	2,77
QC	Harrington-Harbour	CBST-11	129	244	8	**38**	0,441332	**285**	-3	2,77
QC	Havre-St-Pierre	CBST-1	16	16	12	**21**	0,411404	**35**	-3	0,00
QC	Hull	CFGS-TV	117000	200000	34	**142**	2,44209	**7900**	14,1	2,33
QC	Hull	CHOT-TV	367000	684000	40	**142**	1,443235	**9900**	17,1	2,70
QC	Hull	CIVO-TV	932600	1774200	30	**142**	1,509301	**25500**	17,1	2,79
QC	Ile du Havre Aubert	CBIMT-1	55	250	16	**91**	3,6484	**29**	6,3	6,58
QC	Iles-de-la-Madeleine	CBIMT	3900	8400	12	**37**	2,286118	**850**	8,9	3,33
QC	Iles-de-la-Madeleine	CBMYT	3200	6900	7	**37**	2,286118	**1325**	6,1	3,34
QC	Jonquiere	CFRS-TV	29000	100000	4	**138**	0,8319	**5400**	8,1	5,38
QC	Jonquiere	CKTV-TV	137300	325000	12	**163**	1,573264	**13000**	11,8	3,74
QC	Joutel	CJDG-TV-3	148	781	11	**93**	0,53576	**335**	-3	7,22
QC	La Tabatiere	CBMLT	62	200	10	**41**	0,446492	**137**	-3	5,09
QC	La Tabatiere	CBST-13	78	400	4	**34**	0,3904005	**170**	-3	7,10
QC	La Tuque	CBFT-14	15400	28000	3	**46**	0,541812	**11000**	2	2,60
QC	La Tuque	CBMET	103	313	9	**31**	0,42826	**225**	-3	4,83
QC	Lac-Etchemin	CBVT-4	400	2470	55	**34**	1,8535	**72**	9,3	7,91
QC	Lac-MÚgantic	CBVT-3	246	1280	12	**48**	0,458188	**550**	-3	7,16
QC	L'Anse-a-Valleau	CHAU-TV-9	23	57	12	**29**	0,42568	**51**	-3	3,94

PROVINCE	CITY	CALL SIGN	ERPVAV (Watt)	ERPVPK (Watt)	CH	Real Rad. Center(m)	System losses(dB)	Transmitter estimated operating power(Watt)	Closest Gain from Kathrein Catalog (dB)	Antenna Peak to Average Ratio(dB)
QC	Longue-Pointe-De-Min	CBST-18	98	794	6	**43**	0,3979808	**215**	-3	9,09
QC	Malartic	CBVD-TV	9350	19200	5	**165**	0,917536	**1775**	8,1	3,12
QC	Maniwaki	CBVU-TV	1392	3150	15	**64**	1,7167	**484**	6,3	3,55
QC	Matagami	CJDG-TV-4	64	364	9	**63**	0,4833	**142**	-3	7,55
QC	Matane	CBGAT	3700	7310	6	**76**	0,77408	**2760**	2	2,96
QC	Mont-Climont	CBGAT-1	708	1756	13	**28**	0,42396	**526**	1,7	3,94
QC	Mont-Laurier	CBFT-2	13700	28200	3	**122**	0,782604	**5150**	5	3,14
QC	Mont-Louis	CBGAT-10	5150	10350	19	**109**	2,4952	**1070**	9,3	3,03
QC	MontrÚal	CBFT	100000	100000	2	**77**	0,640088	**17800**	8,1	0,00
QC	MontrÚal	CBMT	100000	100000	6	**60**	0,587316	**17800**	5	0,00
QC	MontrÚal	CFCF-TV	325000	325000	12	**96**	1,115744	**18500**	13,5	0,00
QC	MontrÚal	CFJP-TV	697000	697000	35	**102**	1,21229	**17800**	17,1	0,00
QC	MontrÚal	CFTM-TV	325000	325000	10	**100**	1,1412	**18500**	13,5	0,00
QC	MontrÚal	CFTU-TV	10000	10000	29	**91**	1,7598	**880**	12,3	0,00
QC	MontrÚal	CIVM-TV	889500	889500	17	**100**	1,199761	**22500**	17,1	0,00
QC	MontrÚal	CJNT-TV	11000	11000	62	**19**	0,8022	**3100**	6,3	0,00
QC	MontrÚal	CKMI-TV-1	33000	33000	46	**101**	1,89546	**1975**	14,1	0,00
QC	Mont-St-Michel	CBFT-9	3000	10000	16	**90**	2,16996	**580**	9,3	5,23
QC	Mont-Tremblant	CBFT-1	1600	5600	11	**27**	8,860872	**3000**	6,1	5,44
QC	Murdochville	CBGAT-2	1530	4290	10	**72**	9,2115	**1625**	8,9	4,48
QC	New-Carlisle	CBVN-TV	5320	11320	45	**82**	2,03329	**990**	9,3	3,28
QC	New-Richmond	CBVR-TV	6000	8500	27	**37**	1,03495	**885**	9,3	1,51
QC	Perce	CBGAT-20	20000	55250	11	**58**	0,851552	**5950**	6,1	4,41
QC	Perce	CBVP-TV	3710	10700	14	**64**	1,7167	**640**	9,3	4,60
QC	Perce	CHAU-TV-5	21120	58220	13	**58**	0,851552	**3300**	8,9	4,40
QC	Perce	CIVK-TV-2	3310	8550	40	**64**	1,7167	**575**	9,3	4,12
QC	Port-Daniel	CBGAT-21	170	680	7	**52**	0,464896	**380**	-3	6,02
QC	Port-Daniel	CBVF-TV	1310	2540	16	**58**	1,61117	**445**	6,3	2,88
QC	QuÚbec	CBVE-TV	1385	13850	5	**52**	0,66341	**1010**	2	10,00
QC	QuÚbec	CBVT	128800	325000	11	**144**	1,442544	**11800**	11,8	4,02
QC	QuÚbec	CFAP-TV	69000	98000	2	**153**	0,88088	**13000**	8,1	1,52
QC	QuÚbec	CFCM-TV	100000	100000	4	**124**	0,78924	**18400**	8,1	0,00
QC	QuÚbec	CIVQ-TV	970000	970000	15	**176**	1,754722	**28200**	17,1	0,00
QC	QuÚbec	CKMI-TV	20200	86200	20	**90**	1,7465	**1775**	12,3	6,30
QC	Radisson	CBFRT	174	556	8	**67**	0,491212	**390**	-3	5,05

PROVINCE	CITY	CALL SIGN	ERPVAV (Watt)	ERPVPK (Watt)	CH	**Real Rad. Center(m)**	**System losses(dB)**	**Transmitter estimated operating power(Watt)**	**Closest Gain from Kathrein Catalog (dB)**	**Antenna Peak to Average Ratio(dB)**
QC	Radisson	CFBJ-TV	23	206	10	**23**	0,41536	**50**	-3	9,52
QC	Radisson	CJBJ-TV	18	168	13	**50**	0,4618	**40**	-3	9,70
QC	Rapides-des-Joachims	CBOFT-2	161	740	8	**84**	0,519936	**365**	-3	6,62
QC	Rimouski	CFER-TV	174000	325000	11	**56**	0,839168	**13800**	11,8	2,71
QC	Rimouski	CIVB-TV	1674900	1674900	22	**77**	1,030988	**41300**	17,1	0,00
QC	Rimouski	CJBR-TV	100000	100000	2	**38**	0,517796	**17500**	5	0,00
QC	Rimouski	CJPC-TV	458	1292	18	**26**	1,621	**78**	9,3	4,50
QC	Riviere-Au-Renard	CBGAT-22	2900	4200	2	**33**	0,5732	**2075**	2	1,61
QC	Riviere-Au-Renard	CHAU-TV-7	1220	5460	4	**40**	0,604355	**882**	2	6,51
QC	Riviere-au-Tonnerre	CBST-6	1560	3550	7	**85**	1,26968	**510**	6,1	3,57
QC	Riviere-St-Paul	CBMPT	23	120	11	**61**	0,48072	**51**	-3	7,17
QC	Riviere-St-Paul	CBST-16	89	560	21	**52**	2,4208	**36**	6,3	7,99
QC	RiviÞre-du-Loup	CFTF-TV	18100	50000	29	**38**	1,06022	**2700**	9,3	4,41
QC	RiviÞre-du-Loup	CIMT-TV	172200	275400	9	**70**	0,932736	**14000**	11,8	2,04
QC	RiviÞre-du-Loup	CKRT-TV	49000	49000	7	**61**	0,87288	**7700**	8,9	0,00
QC	Roberval	CJPM-TV-1	13000	23500	10	**128**	1,33384	**2275**	8,9	2,57
QC	Rouyn-Noranda	CFEM-TV	166000	346000	13	**191**	1,76384	**16400**	11,8	3,19
QC	Rouyn-Noranda	CFVS-TV-1	104700	331100	20	**136**	2,35431	**10500**	12,3	5,00
QC	Rouyn-Noranda	CIVA-TV-1	122800	256500	8	**191**	1,76384	**12100**	11,8	3,20
QC	Rouyn-Noranda	CKRN-TV	98400	98400	4	**213**	1,069532	**19300**	8,1	0,00
QC	Schefferville	CBFT-8	89	445	9	**17**	0,404696	**195**	-3	6,99
QC	Schefferville	CBSET-1	89	445	7	**23**	0,415016	**195**	-3	6,99
QC	Sept-Iles	CBSET	1500	3700	3	**98**	0,87545	**283**	8,1	3,92
QC	Sept-Iles	CBST	8400	20000	13	**136**	1,388192	**760**	11,8	3,77
QC	Sept-Iles	CFER-TV-2	23000	100000	5	**145**	0,856548	**4300**	8,1	6,38
QC	Sept-Iles	CFTF-TV-7	860	5600	7	**87**	0,52458	**655**	1,7	8,14
QC	Sept-Iles	CIVG-TV	96300	246000	9	**84**	1,029744	**15700**	8,9	4,07
QC	Sherbrooke	CBMT-3	11000	14000	50	**124**	2,20269	**710**	14,1	1,05
QC	Sherbrooke	CFKS-TV	103500	103500	30	**58**	1,31957	**5400**	14,1	0,00
QC	Sherbrooke	CHLT-TV	170000	300000	7	**34**	0,687808	**13100**	11,8	2,47
QC	Sherbrooke	CIVS-TV	549000	549000	24	**35**	0,699585	**12500**	17,1	0,00
QC	Sherbrooke	CKMI-TV-2	12900	24300	11	**58**	0,854304	**2000**	8,9	2,75
QC	Sherbrooke	CKSH-TV	113000	325000	9	**42**	0,740096	**8800**	11,8	4,59
QC	Ste-Anne-des-Monts	CBGAT-11	47800	179600	8	**158**	1,539552	**8700**	8,9	5,75
QC	Ste-Famille	CBVT-2	3150	9230	55	**43**	1,3534	**1000**	6,3	4,67

PROVINCE	CITY	CALL SIGN	ERPVAV (Watt)	ERPVPK (Watt)	CH	Real Rad. Center(m)	System losses(dB)	Transmitter estimated operating power(Watt)	Closest Gain from Kathrein Catalog (dB)	Antenna Peak to Average Ratio(dB)
QC	Ste-Marguerite-Marie	CHAU-TV-1	3500	11200	3	**44**	0,623885	**2525**	2	5,05
QC	St-Fabien-de-Panet	CBVT-5	370	1114	13	**94**	0,53834	**420**	0	4,79
QC	St-Fulgence	CKTV-TV-1	708	2100	27	**26**	1,6179	**120**	9,3	4,72
QC	St-Michel-des-Saints	CBFT-3	165	440	7	**125**	0,5908	**380**	-3	4,26
QC	Stoneham	CBVT-8	1580	6630	44	**93**	2,21148	**102**	14,1	6,23
QC	St-Pamphile	CBSPT	139	370	3	**59**	0,4119752	**305**	-3	4,25
QC	St-Rene-de-Matane	CBGAT-7	313	695	30	**99**	3,8871	**90**	9,3	3,46
QC	Temiscaming	CBFST-2	7080	14200	12	**160**	1,554	**665**	11,8	3,02
QC	Thetford-Mines	CBMT-4	1140	1600	32	**79**	1,97966	**421**	6,3	1,47
QC	Thetford-Mines	CBVT-9	1140	1600	21	**79**	1,97966	**421**	6,3	1,47
QC	Trois-Riviþres	CBMT-1	15200	33000	28	**224**	3,5287	**2000**	12,3	3,37
QC	Trois-Riviþres	CFKM-TV	169500	339100	16	**314**	4,72969	**19400**	14,1	3,01
QC	Trois-Riviþres	CHEM-TV	169400	325000	8	**201**	1,834016	**17000**	11,8	2,83
QC	Trois-Riviþres	CIVC-TV	651800	1500000	45	**314**	2,776941	**24000**	17,1	3,62
QC	Trois-Riviþres	CKTM-TV	164400	325000	13	**295**	2,4828	**19200**	11,8	2,96
QC	Val-d'Or	CFEM-TV-1	59500	94400	10	**160**	1,554	**10900**	8,9	2,00
QC	Val-d'Or	CFVS-TV	122000	430000	25	**142**	2,43544	**8300**	14,1	5,47
QC	Val-d'Or	CIVA-TV	104500	169470	12	**160**	1,554	**9800**	11,8	2,10
QC	Val-d'Or	CJDG-TV	60000	93000	7	**160**	1,554	**11000**	8,9	1,90
QC	Waskaganish	CBFHT	6	6	9	**33**	0,432044	**18**	-3	0,00
SK	Alticane	CIPA-TV-1	23800	46900	10	**113**	1,229264	**2075**	11,8	2,95
SK	Beauval	CBKBT	1880	7780	7	**101**	5,699472	**890**	8,9	6,17
SK	Bellegarde	CBKFT-9	11400	19500	26	**127**	2,23594	**740**	14,1	2,33
SK	Big River	CIPA-TV-2	51	205	7	**45**	0,452856	**113**	-3	6,04
SK	Buffalo Narrows	CBKDT	810	1080	11	**141**	0,618148	**630**	1,7	1,25
SK	Carlyle Lake	CIEW-TV	70000	170000	7	**266**	2,27984	**15100**	8,9	3,85
SK	Colgate	CKCK-TV-1	46400	84800	12	**166**	1,59184	**8600**	8,9	2,62
SK	Cypress Hills	CBCP-TV-2	2450	6750	2	**120**	0,97961	**960**	5	4,40
SK	Debden	CBKFT-3	2900	4900	22	**95**	2,24435	**565**	9,3	2,28
SK	Fond Du Lac	CBKAT-2	823	4935	10	**58**	0,47556	**620**	1,7	7,78
SK	Fort Qu'Appelle	CKCK-TV-7	241	241	7	**26**	0,420348	**535**	-3	0,00
SK	Golden Prairie	CKMC-TV-1	106000	229000	10	**174**	1,648256	**10200**	11,8	3,35
SK	Gravelbourg	CBKFT-6	19000	23500	39	**207**	3,30659	**790**	17,1	0,92
SK	Gravelbourg	CBKGT	19000	23500	45	**207**	3,30659	**790**	17,1	0,92
SK	Greenwater Lake	CBKST-11	9100	17000	4	**157**	0,892572	**1725**	8,1	2,71

PROVINCE	CITY	CALL SIGN	ERPVAV (Watt)	ERPVPK (Watt)	CH	Real Rad. Center(m)	System losses(dB)	Transmitter estimated operating power(Watt)	Closest Gain from Kathrein Catalog (dB)	Antenna Peak to Average Ratio(dB)
SK	Hudson Bay	CBKT-10	420	700	9	**63**	0,483472	**470**	0	2,22
SK	Hudson Bay	CICC-TV-3	410	680	11	**66**	0,488976	**456**	0	2,20
SK	Ile-Ó-la-Crosse	CBKCT	105	795	9	**133**	0,603872	**240**	-3	8,79
SK	Island Falls	CBWBT-2	330	2212	7	**114**	0,572396	**375**	0	8,26
SK	La Ronge	CBKST-2	190	750	12	**46**	0,454404	**420**	-3	5,96
SK	Leoville	CBKFT-11	10700	42800	31	**147**	2,50726	**740**	14,1	6,02
SK	Leoville	CBKST-3	39200	78500	12	**134**	1,375808	**6900**	8,9	3,02
SK	Meadow Lake	CBCS-TV-1	10900	21900	8	**158**	1,538864	**1025**	11,8	3,03
SK	Melfort	CKBQ-TV	11500	15500	2	**140**	0,840432	**2150**	8,1	1,30
SK	Montreal Lake	CBKST-5	336	1200	11	**49**	0,459736	**375**	0	5,53
SK	Moose Jaw	CBKFT-10	695	859	16	**66**	2,8455	**78**	12,3	0,92
SK	Moose Jaw	CBKT-1	48000	100000	4	**153**	0,881828	**9100**	8,1	3,19
SK	Moose Jaw	CKMJ-TV	55400	98000	7	**229**	2,030096	**11300**	8,9	2,48
SK	Nipawin	CBKST-15	4340	8000	10	**119**	5,431232	**1000**	11,8	2,66
SK	Nipawin	CKBQ-TV-1	5400	11600	12	**119**	5,431232	**2425**	8,9	3,32
SK	Norquay	CBKT-9	15000	25000	13	**101**	1,149456	**4790**	6,1	2,22
SK	Norquay	CICC-TV-2	42000	69000	7	**95**	1,105424	**3550**	11,8	2,16
SK	North Battleford	CBKFT-12	10000	33000	41	**125**	2,20668	**975**	12,3	5,19
SK	North Battleford	CBKST-10	43700	55300	7	**94**	1,098544	**7200**	8,9	1,02
SK	North Battleford	CFQC-TV-2	16800	30300	6	**113**	0,753848	**6250**	5	2,56
SK	Pelican Narrows	CBWBT-3	400	1900	5	**122**	0,4640377	**450**	0	6,77
SK	Ponteix	CBCP-TV-3	10500	18800	3	**203**	1,038248	**2050**	8,1	2,53
SK	Ponteix	CBKFT-7	19400	24000	22	**223**	3,51673	**850**	17,1	0,92
SK	Prince Albert	CBKFT-2	6500	10800	3	**128**	0,80188	**1200**	8,1	2,21
SK	Prince Albert	CBKST-9	100000	100000	5	**160**	0,903316	**19000**	8,1	0,00
SK	Prince Albert	CIPA-TV	145000	325000	9	**140**	1,417776	**13200**	11,8	3,51
SK	Regina	CBKFT	103000	235000	13	**185**	1,726	**10100**	11,8	3,58
SK	Regina	CBKT	140000	250000	9	**213**	1,915888	**14300**	11,8	2,52
SK	Regina	CFRE-TV	146000	325000	11	**291**	2,458032	**16900**	11,8	3,48
SK	Regina	CKCK-TV	100000	100000	2	**193**	1,007912	**19400**	8,1	0,00
SK	Riverhurst	CBKT-5	390	710	10	**127**	0,59338	**450**	0	2,60
SK	Saskatoon	CBKFT-1	98000	298000	13	**141**	1,41984	**17400**	8,9	4,83
SK	Saskatoon	CBKST	325000	325000	11	**168**	1,606288	**21000**	13,5	0,00
SK	Saskatoon	CFQC-TV	180000	325000	8	**191**	1,76384	**12000**	13,5	2,57
SK	Saskatoon	CFSK-TV	54000	100000	4	**67**	0,608172	**9600**	8,1	2,68
SK	Shaunavon	CBCP-TV-1	4500	9000	7	**128**	11,576802	**2875**	13,5	3,01

PROVINCE	CITY	CALL SIGN	ERPVAV (Watt)	ERPVPK (Watt)	CH	**Real Rad. Center(m)**	**System losses(dB)**	**Transmitter estimated operating power(Watt)**	**Closest Gain from Kathrein Catalog (dB)**	**Antenna Peak to Average Ratio(dB)**
SK	Southend	CBKST-8	36	1000	13	**47**	0,456984	**80**	-3	14,44
SK	Spiritwood	CBKST-13	9900	21100	2	**90**	0,6818	**1775**	8,1	3,29
SK	St Brieux	CBKFT-4	155	155	7	**56**	0,472808	**345**	-3	0,00
SK	Stanley Mission	CBKST-4	446	1498	8	**20**	0,410544	**495**	0	5,26
SK	Stony Rapids	CBKAT-3	702	2511	7	**127**	0,593896	**542**	1,7	5,54
SK	Stranraer	CBKST-1	163000	323000	9	**316**	2,627968	**19500**	11,8	2,97
SK	Stranraer	CFQC-TV-1	100000	100000	3	**151**	0,87456	**18800**	8,1	0,00
SK	Swift Current	CBKT-4	13300	13300	5	**105**	0,728252	**4950**	5	0,00
SK	Swift Current	CKMC-TV	50800	100000	12	**113**	1,2272	**8600**	8,9	2,94
SK	Uranium City	CBKAT	15	59	8	**47**	0,456984	**33**	-3	5,95
SK	Warmley	CBKT-7	56000	100000	3	**320**	1,407652	**11900**	8,1	2,52
SK	Willow Bunch	CBKFT-8	9000	26400	21	**152**	2,57642	**950**	12,3	4,67
SK	Willow Bunch	CBKT-2	22100	65800	10	**173**	1,64	**2125**	11,8	4,74
SK	Willow Bunch	CKCK-TV-2	27100	52700	6	**194**	1,010124	**5250**	8,1	2,89
SK	Wynyard	CBKT-8	11000	11000	6	**157**	0,892572	**2075**	8,1	0,00
SK	Wynyard	CIWH-TV	56000	140000	12	**140**	1,417776	**9900**	8,9	3,98
SK	Yorkton	CBKT-6	50200	50200	5	**168**	0,9267	**9600**	8,1	0,00
SK	Yorkton	CICC-TV	56000	56000	10	**133**	1,365488	**9800**	8,9	0,00
SK	Zenon Park	CBKFT-5	3000	5600	21	**95**	2,24435	**590**	9,3	2,71
YT	Watson Lake	CBDAT	35	190	8	**31**	0,42826	**77**	-3	7,35
YT	Whitehorse	CBFT-15	474	946	7	**62**	0,482612	**535**	0	3,00
YT	Whitehorse	CFWH-TV	441	798	6	**70**	0,4206384	**490**	0	2,58
YT	Whitehorse	CHWT-TV	199	199	11	**12**	0,39644	**440**	-3	0,00

ANNEX B – TRANSMISSION LINE DERATED POWER CALCULATION

Transmission Line Derated Average Power for - TV CH2-6(50MHz)

Reference From Andrew		
Line size (in)	F1 @ 50 MHz	Rated Pavg (kW) *
7/8	0,8	10,8
1-5/8	0,65	23,7
3	0,6	62,2
4	0,55	94,0
5	0,55	122,0

* Average power rating @ f = 50 MHz

Worst VSWR:	1,5	
Planned Tx Line size:	7/8	inches
F1:	0,8	
Pavg Rating:	10,8	kW
Derating Factor:	1,417	
VSWR Derated Avg. Pwr:	**7,6**	kW

Worst VSWR:	1,5	
Planned Tx Line size:	1-5/8	inches
F1:	0,65	
Pavg Rating:	23,7	kW
Derating Factor:	1,354	
VSWR Derated Avg. Pwr:	**17,5**	kW

Worst VSWR:	1,5	
Planned Tx Line size:	3	inches
F1:	0,6	
Rated Pavg:	62,2	kW
Derating Factor:	1,333	
VSWR Derated Avg. Pwr:	**46,7**	kW

Worst VSWR:	1,5	
Planned Tx Line size:	4	inches
F1:	0,55	
Rated Pavg:	94	kW
Derating Factor:	1,313	
VSWR Derated Avg. Pwr:	**71,6**	kW

Worst VSWR:	1,5	
Planned Tx Line size:	5	inches
F1:	0,55	
Rated Pavg:	122	kW
Derating Factor:	1,313	
VSWR Derated Avg. Pwr:	**93,0**	kW

Transmission Line Derated Average Power - TV CH-7-13(200MHz)

Reference From Andrew		
Line size (in)	F1 @ 200 MHz	Rated Pavg (kW) *
7/8	0,19	5,2
1-5/8	0,13	11,5
3	0,1	28,6
4	0,09	44,0
5	0,09	58,1

* Average power rating @ f = 200 MHz

Worst VSWR:	1,5	
Planned Tx Line size:	7/8	inches
F1:	0,19	
Pavg Rating:	5,2	kW
Derating Factor:	1,163	
VSWR Derated Avg. Pwr:	**4,5**	kW

Worst VSWR:	1,5	
Planned Tx Line size:	1-5/8	inches
F1:	0,13	
Pavg Rating:	11,5	kW
Derating Factor:	1,138	
VSWR Derated Avg. Pwr:	**10,1**	kW

Worst VSWR:	1,5	
Planned Tx Line size:	3	inches
F1:	0,1	
Rated Pavg:	28,6	kW
Derating Factor:	1,125	
VSWR Derated Avg. Pwr:	**25,4**	kW

Worst VSWR:	1,5	
Planned Tx Line size:	4	inches
F1:	0,09	
Rated Pavg:	44	kW
Derating Factor:	1,121	
VSWR Derated Avg. Pwr:	**39,3**	kW

Worst VSWR:	1,5	
Planned Tx Line size:	5	inches
F1:	0,09	
Rated Pavg:	58,1	kW
Derating Factor:	1,121	
VSWR Derated Avg. Pwr:	**51,8**	kW

Transmission Line Derated Average Power for TV CH14-69(600MHz)

Reference From Andrew		
Line size (in)	F_1 @ 600	Rated Pavg (kW) *
7/8	0,04	2,9
1-5/8	0,01	6,4
3	0,01	14,7
4	0,01	23,3
5	0,01	31,5

* Average power rating @ f = 600 MHz

Worst VSWR:	1,5	
Planned Tx Line size:	7/8	inches
F_1:	0,04	
Pavg Rating:	2,9	kW
Derating Factor:	1,100	
VSWR Derated Avg. Pwr:	**2,6**	kW

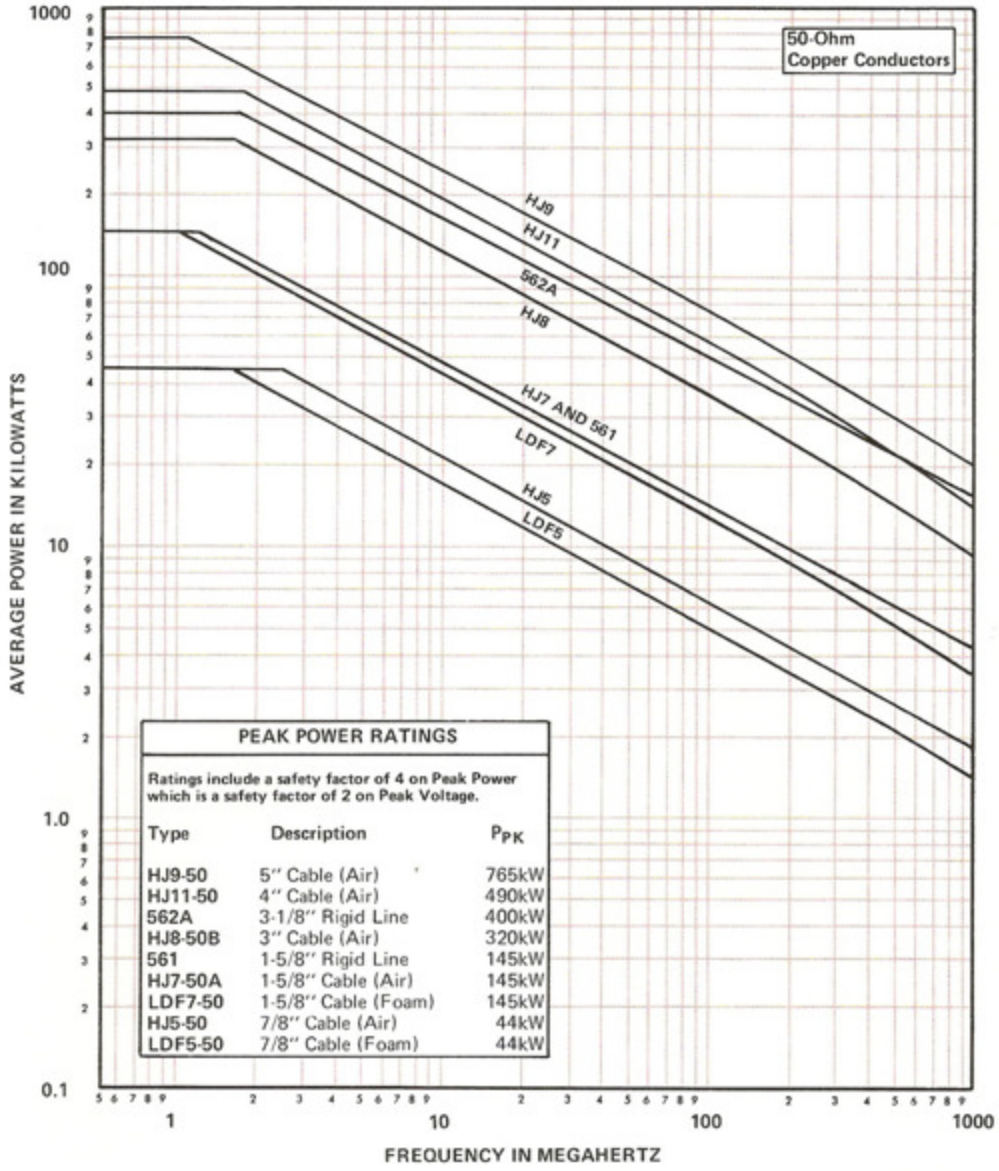
Worst VSWR:	1,5	
Planned Tx Line size:	1-5/8	inches
F_1:	0,01	
Pavg Rating:	6,36	kW
Derating Factor:	1,088	
VSWR Derated Avg. Pwr:	**5,8**	kW

Worst VSWR:	1,5	
Planned Tx Line size:	3	inches
F_1:	0,01	
Rated Pavg:	14,7	kW
Derating Factor:	1,088	
VSWR Derated Avg. Pwr:	**13,5**	kW

Worst VSWR:	1,5	
Planned Tx Line size:	4	inches
F_1:	0,01	
Rated Pavg:	23,3	kW
Derating Factor:	1,088	
VSWR Derated Avg. Pwr:	**21,4**	kW

Worst VSWR:	1,5	
Planned Tx Line size:	5	inches
F_1:	0,01	
Rated Pavg:	31,5	kW
Derating Factor:	1,088	
VSWR Derated Avg. Pwr:	**29,0**	kW

TRANSMISSION LINE POWER RATING



PEAK POWER RATINGS

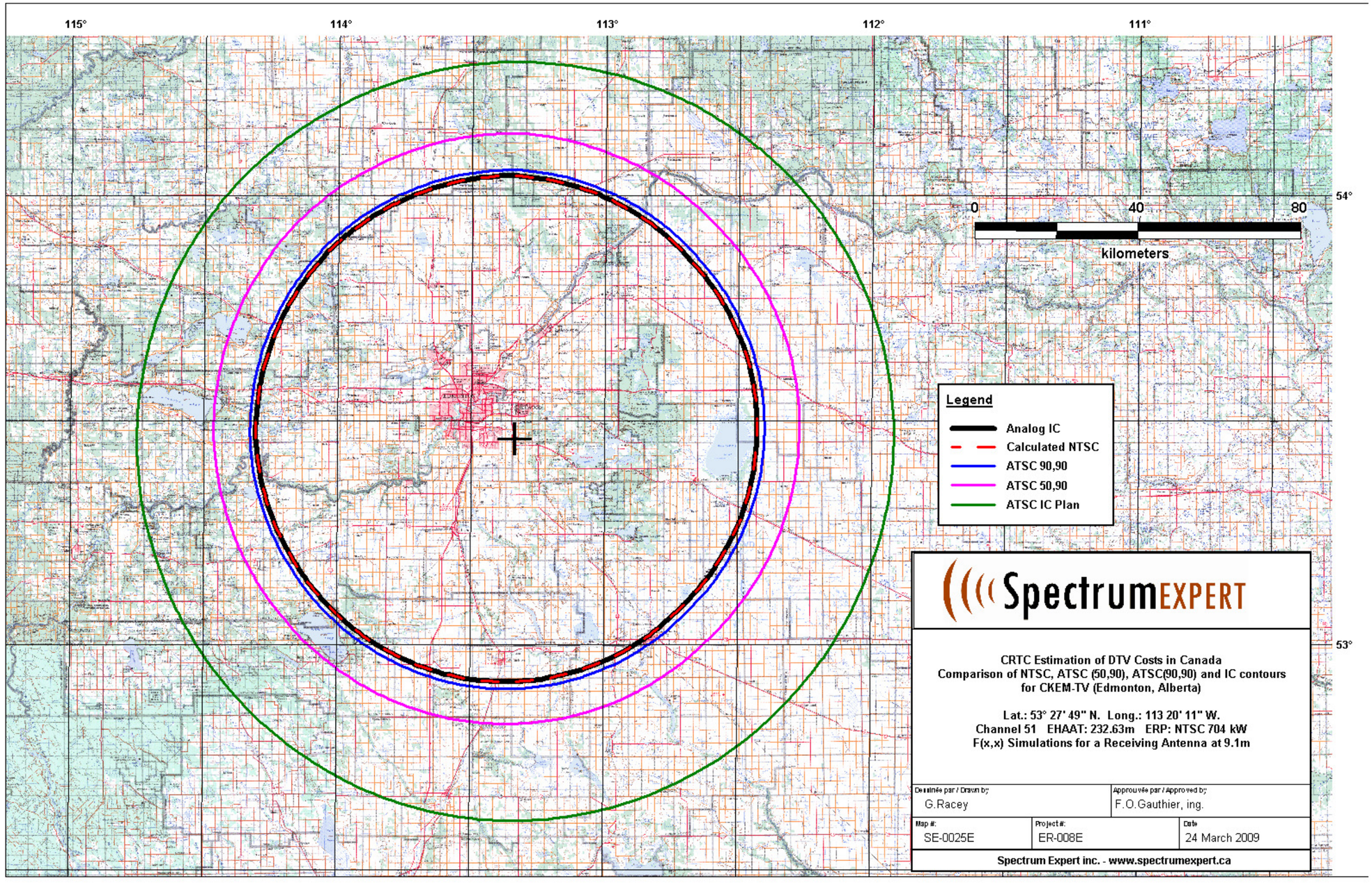
Ratings include a safety factor of 4 on Peak Power which is a safety factor of 2 on Peak Voltage.

Type	Description	P_{PK}
HJ9-50	5" Cable (Air)	765kW
HJ11-50	4" Cable (Air)	490kW
562A	3-1/8" Rigid Line	400kW
HJ8-50B	3" Cable (Air)	320kW
561	1-5/8" Rigid Line	145kW
HJ7-50A	1-5/8" Cable (Air)	145kW
LDF7-50	1-5/8" Cable (Foam)	145kW
HJ5-50	7/8" Cable (Air)	44kW
LDF5-50	7/8" Cable (Foam)	44kW

Power Ratings Based on:
VSWR 1.0
Ambient Temperature 40° C (104° F)
Inner Conductor Temperature
HJ8 and HJ11 121° C (250° F)
Other HELIAX, 100° C (212° F)
Rigid Lines, 102° C (216° F)
Atmospheric Pressure, Dry Air

In Andrew Bulletin 1063H (Broadcast Transmission Line System)

ANNEX C – COVERAGE MAP PRESENTING THE DIFFERENCES BETWEEN NTSC AND ATSC CONTOURS


115°
114°
113°
112°
111°
54°
53°
0
40
80
kilometers
Legend
Analog IC
Calculated NTSC
ATSC 90,90
ATSC 50,90
ATSC IC Plan
SpectrumEXPERT
CRTC Estimation of DTV Costs in Canada
Comparison of NTSC, ATSC (50,90), ATSC(90,90) and IC contours
for CKEM-TV (Edmonton, Alberta)
Lat.: 53° 27' 49" N. Long.: 113 20' 11" W.
Channel 51 EHAAT: 232.63m ERP: NTSC 704 kW
F(x,x) Simulations for a Receiving Antenna at 9.1m
Dessinée par / Drawn by: G.Racey
Approuvée par / Approved by: F.O.Gauthier, ing.
Map #: SE-0025E
Project #: ER-008E
Date: 24 March 2009
Spectrum Expert inc. - www.spectrumexpert.ca

ANNEX D – LIST OF DTV STATIONS PER CATEGORY

List of DTV stations per category for study 1

Transmitter category serving population greater than 300,000 people

PR	CITY	CALL SIGN	DTV CH	NTSC CH	ERP IC Plan (Watt)	NTSC AVG Antenna Gain (dB)	NTSC Peak to AVG (dB)	NTSC System losses (dB)	ATSC TX Power Considered (Watt)	ERP Considered (Watt)
AB	Calgary	CBRT	9	9	7000	11,8	2,61	2,23	423	7000
AB	Calgary	CIAN-TV	13	13	16000	6,1	6,15	13,69	2392	1719
AB	Calgary	CBRFT	16	16	1000000	12,3	2,30	3,51	24	302
AB	Calgary	CKCS-TV	27	32	1000000	N/A	N/A	N/A	360	N/A
AB	Calgary	CFCN-TV	29	4	1000000	N/A	N/A	N/A	25096	N/A
AB	Calgary	CJCO-TV	38	38	84000	14,1	0,00	2,48	1926	27943
AB	Calgary	CICT-TV	41	2	830000	N/A	N/A	N/A	23113	N/A
AB	Calgary	CHCA-TV-1	44	44	390000	12,3	2,08	2,54	343	5238
AB	Calgary	CKAL-TV	49	5	1000000	N/A	N/A	N/A	26798	N/A
AB	Edmonton	CBXT	11	5	49000	N/A	N/A	N/A	7487	N/A
AB	Edmonton	CITV-TV	13	13	14000	13,5	0,00	2,25	1050	14000
AB	Edmonton	CHCA-TV-2	17	17	850000	17,1	0,00	3,40	301	7061
AB	Edmonton	CKES-TV	23	45	4400	N/A	N/A	N/A	274	N/A
AB	Edmonton	CJAL-TV	26	9	1000000	N/A	N/A	N/A	4682	N/A
AB	Edmonton	CBXFT	42	11	1000000	N/A	N/A	N/A	20795	N/A
AB	Edmonton	CJEO-TV	44	56	850000	N/A	N/A	N/A	6798	N/A
AB	Edmonton	CFRN-TV	47	3	1000000	N/A	N/A	N/A	28661	N/A
AB	Edmonton	CKEM-TV	51	51	1000000	17,1	0,00	2,04	3329	106693
BC	Vancouver	CHAN-TV	8	8	650	11,8	2,98	1,01	27	650
BC	Vancouver	CKVU-TV	10	10	1100	13,5	0,00	0,84	60	1100
BC	Vancouver	CIVI-TV-2	17	17	50000	12,3	3,19	1,68	210	5054
BC	Vancouver	CHNM-TV	20	42	53000	N/A	N/A	N/A	881	N/A
BC	Vancouver	CBUFT	26	26	106000	14,1	2,91	1,69	123	4198
BC	Vancouver	CIVT-TV	32	32	33000	17,1	4,50	1,28	307	33000
BC	Vancouver	CBUT	43	2	120000	N/A	N/A	N/A	3428	N/A
BC	Victoria	CHNU-TV-1	21	21	1700	14,1	3,45	1,66	18	681
BC	Victoria	CHNM-TV-1	29	29	1800	N/A	N/A	N/A	T.O	N/A
BC	Victoria	CIVI-TV	40	53	1000000	N/A	N/A	N/A	69	N/A
BC	Victoria	CHEK-TV	49	6	105000	N/A	N/A	N/A	3661	N/A
MB	Winnipeg	CKY-TV	7	7	11700	13,5	0,00	2,40	909	11700
MB	Winnipeg	CKND-TV	9	9	12300	13,5	1,51	2,34	664	12300
MB	Winnipeg	CBWT	27	6	753000	N/A	N/A	N/A	25126	N/A
MB	Winnipeg	CIIT-TV	35	35	1000000	17,1	0,00	3,88	43	905
MB	Winnipeg	CBWFT	51	3	762000	N/A	N/A	N/A	16415	N/A
NS	Halifax	CBHFT	13	13	12200	6,1	4,76	3,62	124	656

PR	CITY	CALL SIGN	DTV CH	NTSC CH	ERP IC Plan (Watt)	NTSC AVG Antenna Gain (dB)	NTSC Peak to AVG (dB)	NTSC System losses (dB)	ATSC TX Power Considered (Watt)	ERP Considered (Watt)
NS	Halifax	CIHF-TV	26	8	845000	N/A	N/A	N/A	8148	N/A
NS	Halifax	CBHT	39	3	845000	N/A	N/A	N/A	23607	N/A
NS	Halifax	CJCH-TV	48	5	845000	N/A	N/A	N/A	23120	N/A
ON	Hamilton	CHCH-TV	11	11	6100	13,5	1,50	2,66	356	6100
ON	Hamilton	CKXT-TV-1	15	45	493000	N/A	N/A	N/A	48	N/A
ON	Hamilton	CITS-TV	36	36	493000	17,1	3,32	2,50	1566	96859
ON	Kitchener	CKCO-TV	13	13	12000	13,5	0,00	1,83	818	12000
ON	Kitchener	CBLFT-8	17	61	115000	N/A	N/A	N/A	3013	N/A
ON	Kitchener	CICO-TV-28	28	28	885000	14,1	2,15	4,21	1171	18709
ON	Kitchener	CBLN-TV-1	29	56	110000	N/A	N/A	N/A	6469	N/A
ON	London	CBLFT-9	7	53	10000	N/A	N/A	N/A	346	N/A
ON	London	CFPL-TV	10	10	10100	14,7	0,00	2,44	600	10100
ON	London	CICO-TV-18	18	18	1200	12,3	0,00	4,43	189	1161
ON	London	CJMT-TV-1	20	20	25000	17,1	1,24	2,88	24	837
ON	London	CHCH-TV-2	24	51	850000	N/A	N/A	N/A	5383	N/A
ON	London	CITS-TV-2	38	14	1700	N/A	N/A	N/A	22	N/A
ON	London	CFMT-TV-1	48	69	500000	N/A	N/A	N/A	4618	N/A
ON	London	CBLN-TV	49	40	500000	N/A	N/A	N/A	10061	N/A
ON	Oshawa	CHEX-TV-2	22	22	170	6,3	3,52	2,26	22	125
ON	Ottawa	CIII-TV-6	6	6	3500	5,0	7,59	0,54	218	3500
ON	Ottawa	CBOFT	9	9	3500	11,8	2,94	1,93	183	3500
ON	Ottawa	CJOH-TV	13	13	5300	11,8	2,61	1,57	275	5300
ON	Ottawa	CJMT-TV-2	17	14	850000	N/A	N/A	N/A	3637	N/A
ON	Ottawa	CITY-TV-3	20	65	845000	N/A	N/A	N/A	3422	N/A
ON	Ottawa	CHCH-TV-1	22	11	845000	N/A	N/A	N/A	13919	N/A
ON	Ottawa	CICO-TV-24	24	24	535000	17,1	2,60	1,30	819	56675
ON	Ottawa	CBOT	25	4	480000	N/A	N/A	N/A	15730	N/A
ON	Ottawa	CFMT-TV-2	27	60	850000	N/A	N/A	N/A	10664	N/A
ON	Ottawa	CITS-TV-1	42	32	850000	N/A	N/A	N/A	412	N/A
ON	Ottawa	CHRO-TV-43	43	43	845000	14,1	2,99	1,68	2287	79544
ON	Toronto	CFTO-TV	9	9	2400	14,7	0,65	3,84	169	2400
ON	Toronto	CICA-TV	19	19	106500	18,3	1,30	4,26	2747	93902
ON	Toronto	CBLT	20	5	99600	N/A	N/A	N/A	2962	N/A
ON	Toronto	CBLFT	25	25	99000	18,3	0,00	4,26	1512	38302
ON	Toronto	CKXT-TV	40	52	107000	N/A	N/A	N/A	182	N/A
ON	Toronto	CIII-TV-41	41	41	100000	18,3	0,00	4,34	2486	61910

PR	CITY	CALL SIGN	DTV CH	NTSC CH	ERP IC Plan (Watt)	NTSC AVG Antenna Gain (dB)	NTSC Peak to AVG (dB)	NTSC System losses (dB)	ATSC TX Power Considered (Watt)	ERP Considered (Watt)
ON	Toronto	CJMT-TV	44	69	1000000	N/A	N/A	N/A	3876	N/A
ON	Toronto	CFMT-TV	47	47	99000	18,3	0,00	4,34	3976	99000
ON	Toronto	CITY-TV	51	57	23000	N/A	N/A	N/A	2570	N/A
ON	Windsor	CBET	9	9	26000	8,9	3,96	1,76	2019	26000
ON	Windsor	CHWI-TV-60	25	60	40000	N/A	N/A	N/A	72	N/A
ON	Windsor	CICO-TV-32	32	32	350000	14,1	0,00	3,40	2018	23711
ON	Windsor	CBEFT	35	54	1000000	N/A	N/A	N/A	1003	N/A
QC	Hull	CIVO-TV	30	30	406000	17,1	2,79	1,51	2007	138325
QC	Hull	CFGS-TV	34	34	406000	14,1	2,33	2,44	675	16910
QC	Hull	CHOT-TV	40	40	200000	17,1	2,70	1,44	952	65277
QC	Montréal	CFTM-TV	10	10	11000	13,5	0,00	1,14	639	11000
QC	Montréal	CFCF-TV	12	12	11000	13,5	0,00	1,12	635	11000
QC	Montréal	CBFT	19	2	1000000	N/A	N/A	N/A	23159	N/A
QC	Montréal	CBMT	21	6	900000	N/A	N/A	N/A	20284	N/A
QC	Montréal	CIVM-TV	26	17	850000	N/A	N/A	N/A	6688	N/A
QC	Montréal	CFTU-TV	29	29	4000	12,3	0,00	1,76	36	411
QC	Montréal	CFJP-TV	35	35	825000	17,1	0,00	1,21	1676	65036
QC	Montréal	CJNT-TV	49	62	4000	N/A	N/A	N/A	37	N/A
QC	Montréal	CKMI-TV-1	51	46	845000	N/A	N/A	N/A	214	N/A
QC	Québec	CBVT	12	11	4900	N/A	N/A	N/A	1514	N/A
QC	Québec	CIVQ-TV	15	15	1000000	17,1	0,00	1,75	2326	79641
QC	Québec	CKMI-TV	20	20	153000	12,3	6,30	1,75	101	4906
QC	Québec	CBVE-TV	25	5	1000000	N/A	N/A	N/A	4594	N/A
QC	Québec	CFAP-TV	39	2	845000	N/A	N/A	N/A	22072	N/A
QC	Québec	CFCM-TV	49	4	845000	N/A	N/A	N/A	21071	N/A

Total = 95

Transmitter category serving population less than 300,000 people

Same DTV channel as NTSC

UHF

PR	CITY	CALL SIGN	DTV CH	NTSC CH	ERP IC Plan(Watt)	NTSC AVG Antenna Gain (dB)	NTSC Peak to AVG (dB)	NTSC System losses (dB)	ATSC TX Power Considered (Watt)	ERP Considered (Watt)
AB	Bow Island	CJIL-TV-1	39	39	12000	14,1	5,60	1,83	12	738
AB	Grande Prairie	CBXFT-8	19	19	2000	9,3	6,26	3,27	21	356
AB	Grouard Mission	CFRN-TV-8	18	18	4900	9,3	2,22	2,04	36	321
AB	Lethbridge	CJIL-TV	17	17	8000	17,1	5,00	2,27	34	3268
AB	Lethbridge	CBXFT-3	23	23	6000	12,3	2,31	4,71	4	38
AB	Medicine Hat	CBXFT-11	34	34	220	12,3	6,23	3,72	3	76
AB	Red Deer	CBXT-13	22	22	1000000	17,1	2,60	1,67	1034	65692
AB	Red Deer	CBXFT-4	31	31	7500	18,3	2,20	3,63	6	300
BC	Dawson Creek	CBUFT-5	33	33	1300	9,3	7,08	4,40	6	102
BC	Enderby	CHBC-TV-5	16	16	340000	6,3	9,65	1,79	4	116
BC	Enderby	CBUT-44	26	26	340000	12,3	4,31	1,59	2	63
BC	Fernie	CBUBT-8	21	21	300	6,3	10,28	0,91	0	9
BC	Kamloops	CBUFT-2	50	50	170	6,3	2,31	1,04	18	104
BC	Kelowna	CBUFT-1	21	21	360	9,3	2,52	1,06	6	76
BC	Kelowna	CBUT-38	45	45	95000	9,3	2,38	0,90	106	1268
BC	New Denver	CBUCT-6	17	17	4100	9,3	5,39	1,75	3	54
BC	Penticton	CBUT-40	17	17	2200	6,3	4,24	1,19	14	121
BC	Radium Hot Springs	CBUBT-5	17	17	4100	6,3	13,62	1,66	1	98
BC	Vernon	CBUT-41	18	18	76000	6,3	3,66	1,02	23	179
BC	Wilson Creek	CHAN-TV-6	23	23	4500	12,3	3,61	1,20	24	696
MB	Brandon	CBWFT-10	21	21	13300	9,3	2,33	2,46	41	341
MB	Manigotagan	CBWGT-3	22	22	298	6,3	2,19	3,88	2	6
MB	Oak Lake	CBWFT-12	32	32	8200	12,3	0,99	2,23	97	1236
MB	Piney	CBWT-3	29	29	1000000	12,3	8,33	1,79	318	24346
NB	Fredericton	CBAFT-10	19	19	13900	9,3	2,69	2,67	32	273
NB	Miramichi City	CIHF-TV-13	40	40	10100	12,3	2,29	1,68	116	2261
NB	Moncton	CIHF-TV-3	27	27	99000	14,1	2,70	2,01	612	18411
NB	St-Stephen	CIHF-TV-12	21	21	2200	12,3	3,92	1,68	37	1050
NB	Woodstock	CIHF-TV-11	38	38	4470	6,3	3,91	0,74	288	2548
NS	Antigonish	CIHF-TV-15	21	21	3100	12,3	4,50	1,45	37	1270
NS	Middleton	CBHFT-5	46	46	845000	14,1	2,43	1,93	936	27019

PR	CITY	CALL SIGN	DTV CH	NTSC CH	ERP IC Plan(Watt)	NTSC AVG Antenna Gain (dB)	NTSC Peak to AVG (dB)	NTSC System losses (dB)	ATSC TX Power Considered (Watt)	ERP Considered (Watt)
NS	Mulgrave	CIHF-TV-16	28	28	181	6,3	2,74	1,65	13	69
NS	New Glasgow	CBHFT-7	15	15	5800	9,3	4,73	1,60	32	567
NS	New Glasgow	CIHF-TV-8	34	34	3700	12,3	1,91	1,80	49	856
NS	Truro	CIHF-TV-4	18	18	3500	9,3	4,75	1,88	34	567
NS	Wolfville	CIHF-TV-5	20	20	846000	12,3	3,99	1,88	1010	27888
NS	Yarmouth	CJCH-TV-7	40	40	4900	12,3	4,39	1,85	55	1692
NS	Yarmouth	CIHF-TV-10	45	45	4900	14,1	4,49	2,46	91	3720
ON	Barrie	CBLT-TV-1	16	16	1000000	14,1	7,45	3,53	1070	67826
ON	Barry's Bay	CBOT-2	19	19	4700	9,3	4,72	2,72	21	283
ON	Belleville	CBLFT-13	15	15	300000	14,1	2,78	2,58	1262	34014
ON	Fort Frances	CBWFT-11	15	15	4600	14,1	6,81	2,67	27	1790
ON	Hawkesbury	CHLF-TV-2	39	39	1000	9,3	1,25	1,22	38	325
ON	Hawkesbury	CICO-TV-96	48	48	500	9,3	1,35	1,22	44	384
ON	Kenora	CICO-TV-91	44	44	1000000	14,1	2,99	2,45	664	19324
ON	Kingston	CICO-TV-38	38	38	850000	14,1	3,50	2,52	733	23626
ON	Little Current	CBCE-TV	16	16	1000000	17,1	3,98	2,50	56	4056
ON	Manitouwage	CBLFT-25	15	15	1000000	12,3	7,52	2,97	85	4121
ON	Mcarthur's Mills	CBOT-5	33	33	191	6,3	4,77	1,74	14	124
ON	Nipigon	CBLK-TV	16	16	2000	6,3	2,72	2,24	26	125
ON	Nipigon	CBLFT-19	26	26	2000	6,3	2,72	2,24	33	158
ON	Orillia	CFTO-TV-21	21	21	850000	14,1	0,00	2,71	1457	20086
ON	Penetanguishene	CBLFT-15	34	34	4100	12,3	1,69	1,58	46	795
ON	Peterborough	CICO-TV-74	18	18	1000000	14,1	5,23	3,21	1367	55973
ON	Peterborough	CIII-TV-27	27	27	375000	17,1	3,51	1,49	2747	223988
ON	Sarnia	CBLN-TV-2	34	34	400	12,3	0,00	2,22	29	299
ON	Sarnia-Oil Springs	CIII-TV-29	29	29	450000	14,1	3,59	3,28	1366	37697
ON	Sault Ste Marie	CICO-TV-20	20	20	1000000	9,3	3,23	3,33	68	563
ON	Sault Ste Marie	CBLFT-20	26	26	8000	6,3	4,77	2,50	20	146
ON	Sault Ste Marie	CHCH-TV-5	38	38	250	9,3	0,00	1,98	30	160
ON	Stevenson	CIII-TV-22	22	22	600000	14,1	7,18	2,06	1510	126117
ON	Sudbury	CICO-TV-19	19	19	1000000	14,1	1,62	2,56	1269	26245
ON	Sudbury	CHLF-TV-1	25	25	1000000	14,1	1,90	2,56	1361	30021
ON	Sudbury	CHCH-TV-4	41	41	4700	14,1	2,61	2,56	70	1828
ON	Wawa	CBLFT-23	16	16	5800	9,3	4,46	2,19	32	453
ON	Wheatley	CHWI-TV	16	16	540000	14,1	4,30	2,72	1149	42457
ON	Wingham	CBLN-TV-4	45	45	1000000	17,1	0,00	1,88	3419	113691
ON	Woodstock	CITY-TV-2	31	31	125000	17,1	0,00	2,21	2882	88797

PR	CITY	CALL SIGN	DTV CH	NTSC CH	ERP IC Plan(Watt)	NTSC AVG Antenna Gain (dB)	NTSC Peak to AVG (dB)	NTSC System losses (dB)	ATSC TX Power Considered (Watt)	ERP Considered (Watt)
PE	Charlottetown	CIHF-TV-14	42	42	6400	12,3	1,92	1,68	117	2102
QC	Alma	CBJET-1	32	32	1000	9,3	0,00	1,16	18	117
QC	Baie-Comeau	CBMIT	28	28	12600	9,3	3,86	1,66	33	469
QC	Carleton	CIVK-TV	15	15	140000	17,1	3,94	0,86	499	52031
QC	Carleton	CFTF-TV-11	44	44	195000	12,3	3,98	0,88	340	11782
QC	Chandler	CBVB-TV	23	23	4000	6,3	2,70	1,61	14	76
QC	Chapeau	CIVP-TV	23	23	15500	9,3	4,43	2,52	26	348
QC	Escuminac	CBVA-TV	18	18	3200	9,3	2,81	1,35	18	219
QC	Gascons	CIVK-TV-1	32	32	1000000	17,1	4,30	1,25	1447	149988
QC	Gaspé	CBVG-TV	18	18	600	9,3	3,05	2,24	28	292
QC	Gaspé	CIVK-TV-3	35	35	550	9,3	3,60	2,24	31	355
QC	Grand-Fonds	CIVB-TV-1	31	31	95000	12,3	4,51	1,64	1426	46883
QC	Ile du Havre Aubert	CBIMT-1	16	16	278	6,3	6,58	3,65	1	5
QC	Maniwaki	CBVU-TV	15	15	258	6,3	3,55	1,72	9	61
QC	Mont-Louis	CBGAT-10	19	19	1100	9,3	3,03	2,50	33	322
QC	Mont-St-Michel	CBFT-9	16	16	4200	9,3	5,23	2,17	18	305
QC	New-Richmond	CBVR-TV	27	27	4700	9,3	1,51	1,03	35	333
QC	Percé	CBVP-TV	14	14	600	9,3	4,60	1,72	17	280
QC	Percé	CIVK-TV-2	40	40	600	9,3	4,12	1,72	27	399
QC	Rimouski	CJPC-TV	18	18	183	9,3	4,50	1,62	2	27
QC	Rimouski	CIVB-TV	22	22	136000	17,1	0,00	1,03	2414	97626
QC	Rivière-du-Loup	CFTF-TV	29	29	550000	9,3	4,41	1,06	223	4099
QC	Rivière-St-Paul	CBST-16	21	21	52000	6,3	7,99	2,42	2	24
QC	Rouyn-Noranda	CFVS-TV-1	20	20	1000000	12,3	5,00	2,35	990	30924
QC	Sherbrooke	CIVS-TV	24	24	62000	17,1	0,00	0,70	746	32558
QC	Sherbrooke	CBMT-3	50	50	4000	14,1	1,05	2,20	44	863
QC	St-Fulgence	CKTV-TV-1	27	27	2000	9,3	4,72	1,62	3	57
QC	Stoneham	CBVT-8	44	44	5000	14,1	6,23	2,21	4	253
QC	St-René-de-Matane	CBGAT-7	30	30	9000	9,3	3,46	3,89	4	31
QC	Trois-Rivières	CBMT-1	28	28	700000	12,3	3,37	3,53	162	2654
QC	Val-d'Or	CFVS-TV	25	25	1000000	14,1	5,47	2,44	871	45039
SK	Bellegarde	CBKFT-9	26	26	8970	14,1	2,33	2,24	30	792
SK	Debden	CBKFT-3	22	22	350	9,3	2,28	2,24	13	113
SK	Gravelbourg	CBKFT-6	39	39	2650	17,1	0,92	3,31	39	1153
SK	Gravelbourg	CBKGT	45	45	2650	17,1	0,92	3,31	44	1290
SK	Leoville	CBKFT-11	31	31	4900	14,1	6,02	2,51	32	1843
SK	Moose Jaw	CBKFT-10	16	16	2240	12,3	0,92	2,85	2	18

PR	CITY	CALL SIGN	DTV CH	NTSC CH	ERP IC Plan(Watt)	NTSC AVG Antenna Gain (dB)	NTSC Peak to AVG (dB)	NTSC System losses (dB)	ATSC TX Power Considered (Watt)	ERP Considered (Watt)
SK	North Battleford	CBKFT-12	41	41	6900	12,3	5,19	2,21	53	1804
SK	Ponteix	CBKFT-7	22	22	1820	17,1	0,92	3,52	29	808
SK	Willow Bunch	CBKFT-8	21	21	2261	12,3	4,67	2,58	32	879
SK	Zenon Park	CBKFT-5	21	21	7300	9,3	2,71	2,24	21	202

Total = 109

VHF

PR	CITY	CALL SIGN	DTV CH	NTSC CH	ERP IC Plan (Watt)	NTSC AVG Antenna Gain (dB)	NTSC Peak to AVG (dB)	NTSC System losses (dB)	ATSC TX Power Considered (Watt)	ERP Considered (Watt)
AB	Ashmont	CFRN-TV-4	12	12	24000	6,1	2,61	1,69	971	4892
AB	Athabasca	CBXT-1	8	8	46000	11,8	2,98	1,48	353	7540
AB	Athabasca	CFRN-TV-12	13	13	880	8,9	2,63	6,96	233	668
AB	Bonnyville	CBXFT-1	6	6	8000	8,1	1,74	0,91	1025	8000
AB	Bonnyville	CKSA-TV-2	9	9	24000	11,8	3,01	1,58	361	7601
AB	Burmis	CFCN-TV-4	5	5	150	0,0	0,00	0,40	113	103
AB	Chateh	CBXAT-7	5	5	90	-3,0	5,89	0,41	51	90
AB	Coronation	CBXT-14	10	10	20000	8,9	3,31	0,91	1483	20000
AB	Drumheller	CFCN-TV-1	12	12	8200	8,9	3,01	1,59	761	8200
AB	Etzikom	CBCA-TV-1	12	12	46000	8,9	3,98	1,32	412	5905
AB	Falher	CBXFT-2	6	6	49000	2,0	2,23	0,81	836	1838
AB	Fort Mcmurray	CBXT-6	9	9	350000	11,8	4,57	4,45	238	3692
AB	Fort Mcmurray	CBXFT-6	12	12	400000	11,8	4,57	4,41	240	3764
AB	Fort Vermilion	CBXAT-5	11	11	158000	11,8	5,75	3,92	151	3489
AB	Grande Prairie	CBXAT	10	10	11000	11,8	2,95	1,50	521	11000
AB	Grande Prairie	CFRN-TV-1	13	13	9700	11,8	3,01	1,80	485	9700
AB	High Level	CBXAT-4	8	8	5300	0,0	4,50	0,49	92	232
AB	Hinton	CBXT-3	8	8	900	1,7	3,01	0,44	88	236
AB	Jean D'Or	CBXAT-9	13	13	140	-3,0	4,56	0,49	15	19
AB	Lac La Biche	CBXT-5	10	10	1200	1,7	3,01	0,48	132	349
AB	Lethbridge	CISA-TV	7	7	22000	11,8	2,89	1,79	1129	22000
AB	Lethbridge	CBRT-6	10	10	22000	11,8	2,56	1,69	1188	22000
AB	Lethbridge	CFCN-TV-5	13	13	32000	8,9	3,87	1,58	1893	24920
AB	Lloydminster	CITL-TV	4	4	5000	9,9	0,00	1,02	648	5000
AB	Lougheed	CFRN-TV-7	7	7	4300	11,8	6,23	9,31	491	3660
AB	Manning	CBXAT-3	12	12	410	6,1	3,01	7,46	281	410
AB	Medicine Hat	CFCN-TV-8	8	8	53000	11,8	6,28	8,92	448	3686

PR	CITY	CALL SIGN	DTV CH	NTSC CH	ERP IC Plan (Watt)	NTSC AVG Antenna Gain (dB)	NTSC Peak to AVG (dB)	NTSC System losses (dB)	ATSC TX Power Considered (Watt)	ERP Considered (Watt)
AB	Peace River	CBXAT-1	7	7	74000	8,9	3,01	6,39	418	1492
AB	Peace River	CBXFT-5	9	9	25000	8,9	1,97	6,18	109	322
AB	Red Deer	CFRN-TV-6	8	8	12000	11,8	5,09	1,83	374	11977
AB	Red Deer	CITV-TV-1	10	10	14000	13,5	2,57	1,66	508	14000
AB	Rocky Mountain House	CFRN-TV-10	12	12	260	0,0	5,81	0,49	76	260
AB	Rosemary	CBRT-5	11	11	26000	11,8	2,58	1,73	1413	26000
AB	Slave Lake	CBXAT-11	11	11	6400	1,7	8,41	0,49	90	827
AB	Whitecourt	CFRN-TV-3	12	12	4400	11,8	2,62	0,83	138	3148
BC	100 Mile House	CFJC-TV-6	5	5	400	2,0	0,00	0,37	143	208
BC	Alert Bay	CBUT-16	11	11	440	-3,0	3,51	0,50	116	116
BC	Bonnington Falls	CBUDT	13	13	440	-3,0	8,59	0,43	14	48
BC	Burns Lake	CH4333	7	7	2600	-3,0	4,69	0,39	91	123
BC	Burns Lake	CKHS-TV	13	13	95	-3,0	5,95	0,39	6	11
BC	Campbell River	CHEK-TV-5	13	13	2700	8,9	4,77	10,61	182	369
BC	Canal Flats	CBUBT-1	12	12	410000	1,7	12,73	0,44	115	2890
BC	Chetwynd	CBCD-TV-2	7	7	8	-3,0	5,36	0,43	5	8
BC	Clinton	CFJC-TV-4	9	9	1000	-3,0	0,00	0,39	59	27
BC	Courtenay	CKVU-TV-1	5	5	49000	5,0	2,57	0,56	1208	6058
BC	Courtenay	CBUT-1	9	9	39000	1,7	3,01	0,49	84	222
BC	Courtenay	CHAN-TV-4	11	11	4200	6,1	2,93	10,11	426	332
BC	Cranbrook	CFCN-TV-9	5	5	110	-3,0	5,85	0,38	51	90
BC	Cranbrook	CBUBT-7	10	10	340	1,7	3,88	0,41	90	295
BC	Crawford Bay	CBUCT-1	5	5	85000	0,0	3,01	0,40	239	435
BC	Dawson Creek	CJDC-TV	5	5	2200	8,1	2,79	1,01	162	1575
BC	Fernie	CBUBT-9	8	8	14000	-3,0	12,37	0,43	39	303
BC	Fort Fraser	CBCB-TV-2	13	13	4000	0,0	4,42	0,48	44	108
BC	Fort Nelson	CBUGT	8	8	370	8,9	0,00	5,65	76	161
BC	Fort St John	CBCD-TV-3	9	9	15500	-3,0	5,64	0,48	70	115
BC	Fraser Lake	CFFL-TV-1	9	9	50	-3,0	4,46	0,42	39	50
BC	Golden	CBUBT-2	13	13	14000	-3,0	11,55	0,46	7	47
BC	Hazelton	CHHZ-TV	9	9	440	-3,0	4,99	0,40	32	47
BC	Houston	CFHO-TV	8	8	640	-3,0	4,70	0,47	36	48
BC	Mcbride	CBUHT-3	6	6	85000	2,0	6,02	0,40	242	1401
BC	Nelson	CBUCT	9	9	40	1,7	3,63	0,49	13	40
BC	Oliver	CBUT-42	6	6	4500	-3,0	3,45	0,38	105	107
BC	Oliver	CHBC-TV-3	8	8	14000	-3,0	3,01	0,41	72	66

PR	CITY	CALL SIGN	DTV CH	NTSC CH	ERP IC Plan (Watt)	NTSC AVG Antenna Gain (dB)	NTSC Peak to AVG (dB)	NTSC System losses (dB)	ATSC TX Power Considered (Watt)	ERP Considered (Watt)
BC	Ootsa Lake	CH4467	5	5	3000	-3,0	3,58	0,37	37	39
BC	Ootsa Lake	CHHH-TV	10	10	11300	-3,0	3,56	0,43	53	54
BC	Ootsa Lake	CHBL-TV	11	11	13000	-3,0	1,27	0,40	45	28
BC	Penticton	CHKL-TV-1	10	10	6100	0,0	3,90	0,41	86	193
BC	Penticton	CHBC-TV-1	13	13	50	0,0	2,55	0,42	31	50
BC	Port Hardy	CBUT-19	6	6	300	-3,0	2,48	0,40	160	130
BC	Prince George	CIFG-TV	12	12	2300	6,1	3,93	12,60	1035	573
BC	Purden Lake	CBUHT-1	10	10	210	-3,0	6,13	0,48	16	29
BC	Salmon Arm	CHBC-TV-4	9	9	440	-3,0	3,88	0,43	133	147
BC	Smithers	CBCY-TV-2	5	5	42	-3,0	6,03	0,38	23	42
BC	Smithers	CFHO-TV-1	13	13	70	-3,0	3,33	0,44	38	37
BC	Sparwood	CBUBT-10	11	11	13600	-3,0	10,86	0,41	65	361
BC	Terrace	CBUFT-3	11	11	2600	1,7	2,63	0,43	60	148
BC	Trail	CKTN-TV	8	8	2200	8,9	6,32	15,73	2477	2200
BC	Trail	CBUAT	11	11	14400	8,9	2,43	13,36	792	496
BC	Valemount	CBUHT-5	12	12	14000	0,0	5,46	0,42	149	477
BC	Vernon	CHBC-TV-2	7	7	220	0,0	3,01	0,42	62	113
BC	Vernon	CHKL-TV-2	12	12	240	-3,0	3,88	0,41	92	103
BC	Whistler	CBUWT	13	13	440	-3,0	4,02	0,48	72	82
BC	Woss Camp	CBUT-13	12	12	150	0,0	5,00	0,43	52	150
MB	Dauphin	CKYD-TV	12	12	6312	8,9	4,06	1,62	463	6312
MB	Fairford	CBWGT-2	7	7	928	6,1	3,01	3,60	230	818
MB	Fisher Branch	CKYA-TV	8	8	57200	8,9	3,01	1,42	831	9315
MB	Fisher Branch	CBWGT	10	10	32500	11,8	2,66	1,60	466	9009
MB	Flin Flon	CBWBT	10	10	21800	11,8	3,91	1,11	106	3060
MB	Flin Flon	CKYF-TV	13	13	104	8,9	2,97	4,08	17	104
MB	Foxwarren	CKX-TV-1	11	11	21000	8,9	2,94	1,81	1935	19480
MB	Gods Lake Narrow	CBWXT	13	13	7822	6,1	6,80	2,56	160	1735
MB	Grand Rapids	CBWHT	8	8	64	-3,0	6,35	0,49	33	64
MB	Jackhead	CBWGT-1	5	5	7600	8,1	2,75	1,26	123	1124
MB	Leaf Rapids	CBWQT	13	13	534	0,0	8,45	0,55	46	286
MB	Little Grand Rapids	CBWZT	9	9	964	-3,0	11,75	0,57	108	708
MB	Mccusker Lake	CBWUT	10	10	867	-3,0	8,29	0,52	110	331
MB	Melita	CKX-TV-2	9	9	89	-3,0	0,00	0,49	97	43
MB	Pine Falls	CBWFT-6	11	11	631	11,8	6,78	3,59	20	631
MB	Portage La Prairie	CHMI-TV	13	13	8300	11,8	2,21	2,69	613	8300

PR	CITY	CALL SIGN	DTV CH	NTSC CH	ERP IC Plan (Watt)	NTSC AVG Antenna Gain (dB)	NTSC Peak to AVG (dB)	NTSC System losses (dB)	ATSC TX Power Considered (Watt)	ERP Considered (Watt)
MB	The Pas	CBWFT-1	6	6	41	-3,0	4,69	0,41	31	41
MB	The Pas	CBWIT	7	7	44	1,7	2,29	0,52	20	44
MB	The Pas	CKYP-TV	12	12	141	6,1	2,99	3,39	38	141
MB	Thompson	CBWTT	7	7	76	0,0	4,51	0,49	30	76
MB	Thompson	CKYT-TV	9	9	218	6,1	2,98	2,79	51	218
MB	Waasagomach	CBWWT	9	9	4500	6,1	7,14	3,06	254	2641
NB	Bon Accord	CBAT-TV-1	6	6	1700	8,1	2,62	0,85	175	1700
NB	Campbellton	CBAFT-7	9	9	16700	8,9	5,41	0,82	748	16700
NB	Chatham	CBAT-TV-3	6	6	1860	5,0	2,22	0,62	408	1860
NB	Edmundston	CIMT-TV-1	4	4	31000	2,0	3,92	0,55	295	1018
NB	Edmundston	CBAFT-2	13	13	3200	11,8	2,81	1,48	156	3200
NB	Moncton	CBAT-TV-2	7	7	6920	13,5	3,69	1,40	182	6920
NB	Moncton	CBAFT	11	11	16190	13,5	3,73	1,30	413	16190
NB	Saint John	CKLT-TV	9	9	3800	11,8	3,02	0,96	156	3800
NB	Saint John	CIHF-TV-2	12	12	5780	6,1	2,88	0,60	840	5780
NB	Upsalquitch	CKAM-TV	12	12	3430	11,8	2,48	2,01	204	3430
NF	Bonavista	CJWB-TV	10	10	7430	6,1	2,50	0,79	521	3148
NF	Carmanville	CBNAT-7	7	7	1300	6,1	8,92	1,66	60	1300
NF	Clarenville	CBNT-10	7	7	580	0,0	3,01	0,42	61	111
NF	Clarenville	CJCV-TV	11	11	30	-3,0	4,79	0,54	22	30
NF	Conche	CBNAT-8	12	12	400	0,0	6,08	0,42	50	182
NF	Corner Brook	CBYT	5	5	11790	5,0	1,71	0,63	1013	4108
NF	Corner Brook	CJWN-TV	10	10	38205	11,8	3,86	1,06	107	3076
NF	Cow Head	CBYT-6	8	8	2400	6,1	4,37	1,24	287	2400
NF	Deer Lake	CJLW-TV	8	8	14200	0,0	7,17	0,47	77	360
NF	Deer Lake	CBYAT	12	12	1100	8,9	2,52	2,71	52	386
NF	Fox Harbour	CBNAT-10	7	7	29500	6,1	5,38	0,85	540	6235
NF	Goose Bay	CFLA-TV	8	8	21000	6,1	6,98	3,31	178	1684
NF	Goose Bay	CHTG-TV	12	12	21000	1,7	6,98	0,46	127	839
NF	Grand Falls	CBNAT	11	11	14710	13,5	0,00	1,63	956	14710
NF	Hampden	CBNAT-23	13	13	440	-3,0	6,36	0,42	102	202
NF	Labrador City	CBFT-12	11	11	440	-3,0	7,97	0,43	142	404
NF	Labrador City	CBNLT	13	13	440	-3,0	7,97	0,43	142	404
NF	Marystown	CBNT-3	5	5	4150	9,9	2,77	0,68	262	4150
NF	Marystown	CJMA-TV	11	11	130	1,7	3,01	0,49	49	130
NF	Millertown	CBNAT-5	9	9	50	-3,0	9,20	0,49	13	50

PR	CITY	CALL SIGN	DTV CH	NTSC CH	ERP IC Plan (Watt)	NTSC AVG Antenna Gain (dB)	NTSC Peak to AVG (dB)	NTSC System losses (dB)	ATSC TX Power Considered (Watt)	ERP Considered (Watt)
NF	Mt St Margaret	CBNAT-9	9	9	11760	8,9	2,03	1,12	816	7800
NF	Musgrave Harbour	CBNAT-11	9	9	4500	1,7	6,87	0,41	204	1333
NF	Placentia	CBNT-2	12	12	32300	8,9	2,35	1,01	308	3251
NF	Port Au Port	CBFNT	13	13	5980	6,1	6,12	0,69	421	5980
NF	Port Rexton	CBNT-1	13	13	20300	8,9	3,01	1,52	510	5576
NF	Portland Creek	CBYT-8	13	13	93800	6,1	7,25	2,18	124	1632
NF	Ramea	CBNT-25	13	13	2000	6,1	7,64	1,11	92	1695
NF	Red Rocks	CJRR-TV	11	11	427	0,0	3,04	0,51	70	125
NF	Roddickton	CBNAT-22	11	11	13600	1,7	4,01	0,48	193	645
NF	Rose Blanche	CBYT-11	9	9	440	-3,0	4,40	0,40	68	86
NF	Springdale	CBNAT-13	13	13	440	0,0	2,53	0,42	97	157
NF	St Alban's	CBNT-4	9	9	3400	0,0	7,10	0,44	125	580
NF	St Andrew's	CBYT-5	6	6	3190	2,0	2,88	0,41	167	467
NF	St Anthony	CBNAT-4	6	6	7820	8,1	2,90	0,69	208	2236
NF	St John's	CBNT	8	8	13730	11,8	2,59	1,17	653	13730
NF	St Mary's	CBNT-6	10	10	570	1,7	6,08	0,53	81	429
NF	St Vincent's	CBNT-26	7	7	1100	6,1	4,51	1,97	150	1100
NF	Stephenville	CBYT-1	8	8	5710	6,1	6,04	0,76	416	5710
NF	Sunnyside	CBNT-41	9	9	22	0,0	5,85	0,43	6	22
NF	Wesleyville	CBNT-9	5	5	1250	-3,0	5,68	0,40	172	290
NS	Antigonish	CJCB-TV-2	9	9	12460	11,8	2,69	1,42	615	12460
NS	Aspen	CBHT-14	5	5	96	-3,0	6,68	0,45	39	81
NS	Bridgewater	CIHF-TV-6	9	9	7885	11,8	3,19	1,14	102	2471
NS	Caledonia	CJCH-TV-6	6	6	6700	8,1	2,88	0,85	650	6700
NS	Canning	CJCH-TV-1	10	10	2800	8,9	3,01	1,12	233	2800
NS	Cheticamp	CBHFT-4	10	10	3570	11,8	3,25	1,16	118	2879
NS	Dingwall	CBIT-16	12	12	440	-3,0	4,55	0,41	32	41
NS	Inverness	CJCB-TV-1	6	6	2240	2,0	0,00	0,51	1098	1547
NS	Inverness	CBIT-19	8	8	4635	1,7	3,41	0,48	97	281
NS	Isle Madame	CIMC-TV	10	10	98	0,0	4,26	0,44	41	98
NS	Liverpool	CBHT-1	12	12	5310	8,9	2,39	2,60	49	359
NS	Middleton	CBHT-6	8	8	5030	8,9	3,92	1,10	339	5030
NS	Mulgrave	CBHFT-2	7	7	21677	11,8	3,86	1,40	811	21677
NS	Mulgrave	CBHT-11	12	12	26260	11,8	3,01	1,28	1165	26260
NS	Sheet Harbour	CBHT-4	11	11	20240	8,9	2,93	0,96	231	2822
NS	Shelburne	CBHT-2	7	7	66800	8,9	6,53	1,06	212	5794

PR	CITY	CALL SIGN	DTV CH	NTSC CH	ERP IC Plan (Watt)	NTSC AVG Antenna Gain (dB)	NTSC Peak to AVG (dB)	NTSC System losses (dB)	ATSC TX Power Considered (Watt)	ERP Considered (Watt)
NS	Sydney	CIHF-TV-7	11	11	24420	8,9	4,65	1,13	1399	24420
NS	Sydney	CBHFT-3	13	13	39620	8,9	2,96	2,36	175	1563
NS	Yarmouth	CBHT-3	11	11	5700	8,9	3,88	1,58	432	5700
NT	Fort Providence	CBEBT-3	13	13	380	0,0	7,16	0,42	81	627
NT	Hay River	CBEBT-1	7	7	140	1,7	6,77	0,47	22	1082
NT	Inuvik	CHAK-TV	6	6	140	-3,0	2,87	0,45	160	167
NT	Rae-Edzo	CFYK-TV-1	10	10	310	-3,0	6,74	0,43	144	460
NT	Yellowknife	CFYK-TV	8	8	2400	6,1	2,43	2,66	165	640
NT	Yellowknife	CHTY-TV	11	11	130	0,0	2,81	0,46	76	293
NT	Yellowknife	CH4127	13	13	130	0,0	2,81	0,46	76	293
NU	Cape Dorset	CBEJT	9	9	370	-3,0	4,98	0,40	143	206
ON	Atikokan	CBWCT-1	7	7	560	8,9	3,01	5,37	124	560
ON	Chapleau	CBCU-TV	7	7	500	1,7	6,20	0,51	91	500
ON	Chapleau	CBLFT-22	13	13	9000	0,0	7,02	0,45	151	685
ON	Dryden	CBWFT-9	6	6	12600	8,1	2,39	0,82	556	5151
ON	Dryden	CBWDT	9	9	32000	11,8	2,55	1,53	150	2871
ON	Elliot Lake	CBEC-TV	7	7	32000	11,8	3,00	0,85	488	12127
ON	Elliot Lake	CBLFT-6	12	12	37000	6,1	2,99	0,76	958	6523
ON	Fort Albany	CBLDT	8	8	250	0,0	6,99	0,44	55	250
ON	Fort Frances	CBWCT	5	5	6200	8,1	2,78	0,90	623	6200
ON	Geraldton	CBLFT-26	7	7	21500	11,8	1,70	5,49	94	595
ON	Geraldton	CBLGT	13	13	28000	11,8	2,91	1,59	379	7774
ON	Gogama	CBLFT-21	12	12	185	0,0	7,03	0,58	42	185
ON	Hearst	CBCC-TV	5	5	12500	8,1	1,83	0,97	271	2132
ON	Hearst	CBLFT-5	7	7	26500	11,8	3,01	1,54	145	3072
ON	Huntsville	CKNY-TV-11	11	11	24000	11,8	2,59	1,66	1278	24000
ON	Huntsville	CICA-TV-13	13	13	28200	8,9	3,00	1,65	547	5786
ON	Kapuskasing	CITO-TV-1	10	10	132000	11,8	6,99	3,58	85	2832
ON	Kapuskasing	CBLFT-4	12	12	62000	8,9	2,37	1,35	466	4577
ON	Kearns	CITO-TV-2	11	11	21000	11,8	3,01	1,28	932	21000
ON	Kenora	CBWAT	8	8	64000	11,8	3,01	1,23	107	2448
ON	Kenora	CJBN-TV	13	13	50	-3,0	0,00	0,48	84	38
ON	Kingston	CKWS-TV	11	11	9400	11,8	3,02	2,48	548	9400
ON	Manitouwage	CBLAT-1	8	8	28000	11,8	2,60	1,58	379	7241
ON	Marathon	CBLAT-4	11	11	12000	11,8	3,88	1,11	111	3168
ON	Midland	CIII-TV-7	7	7	6900	11,8	2,70	2,87	474	6900

PR	CITY	CALL SIGN	DTV CH	NTSC CH	ERP IC Plan (Watt)	NTSC AVG Antenna Gain (dB)	NTSC Peak to AVG (dB)	NTSC System losses (dB)	ATSC TX Power Considered (Watt)	ERP Considered (Watt)
ON	North Bay	CICA-TV-6	6	6	6000	8,1	2,22	0,84	677	6000
ON	North Bay	CKNY-TV	10	10	27000	8,9	2,74	1,29	2216	24030
ON	Owen Sound	CICA-TV-12	12	12	61000	8,9	3,81	1,36	1390	18962
ON	Paris	CIII-TV	6	6	4000	8,1	0,00	1,34	844	4000
ON	Peterborough	CHEX-TV	12	12	20000	11,8	3,30	2,62	1129	20000
ON	Red Lake	CBWET	10	10	330000	1,7	2,99	0,49	96	252
ON	Sioux Lookout	CBWDT-1	12	12	22000	11,8	3,80	1,58	502	12677
ON	Sturgeon Falls	CBLFT-1	7	7	5900	11,8	2,54	1,53	167	3193
ON	Sudbury	CBLT-6	9	9	19000	11,8	2,34	1,79	1105	19000
ON	Sudbury	CFGC-TV	11	11	13000	8,9	0,00	1,14	630	3757
ON	Sudbury	CBLFT-2	13	13	9800	8,9	2,98	1,01	208	2548
ON	Thunder Bay	CICO-TV-9	9	9	16500	11,8	0,00	1,55	523	5544
ON	Thunder Bay	CBLFT-18	12	12	16500	11,8	0,00	1,55	371	3927
ON	Timmins	CBLT-7	6	6	8500	8,1	0,00	0,94	1633	8500
ON	Timmins	CICA-TV-7	7	7	23000	8,9	2,26	1,40	2429	23000
ON	Timmins	CBLFT-3	9	9	19000	8,9	2,73	1,56	513	5213
ON	Timmins	CHCH-TV-7	11	11	370	8,9	3,42	4,48	61	370
ON	Timmins	CIII-TV-13	13	13	30000	8,9	3,33	1,29	363	4506
ON	Wawa	CHBX-TV-1	7	7	36000	11,8	3,04	1,15	505	11803
ON	Wawa	CBLAT-3	9	9	26000	8,9	3,01	1,28	505	5833
ON	White River	CBLAT-2	12	12	17000	0,0	3,89	0,56	77	166
PE	Charlottetown	CKCW-TV-1	8	8	9830	6,1	3,01	1,02	660	4251
PE	Charlottetown	CBCT	13	13	12060	13,5	2,59	1,89	458	12060
PE	Elmira	CBCT-2	11	11	35	0,0	5,98	0,46	10	35
PE	St Edward	CKCW-TV-2	5	5	260	0,0	3,69	0,42	122	260
PE	St Edward	CBAFT-6	9	9	49	-3,0	3,80	0,45	45	49
QC	Aguanish	CBST-7	8	8	320	0,0	6,87	0,42	72	320
QC	Baie-Comeau	CFTF-TV-5	9	9	1100	1,7	8,46	0,44	117	1100
QC	Baie-Trinité	CIVF-TV	12	12	46000	8,9	4,20	1,03	1425	22965
QC	Beauceville	CBVT-6	6	6	11100	8,1	4,16	0,95	139	1877
QC	Blanc-Sablon	CBMST	5	5	210	-3,0	7,92	0,43	75	210
QC	Carleton	CHAU-TV	5	5	600	8,1	2,48	0,71	62	600
QC	Chandler	CHAU-TV-4	6	6	150	-3,0	3,25	0,40	27	26
QC	Chandler	CBGAT-15	8	8	400	-3,0	4,03	0,46	124	141
QC	Chapeau	CBOFT-1	11	11	600	1,7	9,36	0,59	54	600
QC	Chibougamau	CBFAT	5	5	170	2,0	0,00	0,42	108	156

PR	CITY	CALL SIGN	DTV CH	NTSC CH	ERP IC Plan (Watt)	NTSC AVG Antenna Gain (dB)	NTSC Peak to AVG (dB)	NTSC System losses (dB)	ATSC TX Power Considered (Watt)	ERP Considered (Watt)
QC	Chicoutimi	CJPM-TV	6	6	16000	8,1	2,15	0,58	1728	16000
QC	Chicoutimi	CIVV-TV	8	8	90000	11,8	2,93	1,58	2023	41743
QC	Cloridorme	CBGAT-16	8	8	350	-3,0	4,49	0,44	56	72
QC	Fermont	CBFT-13	7	7	63	-3,0	6,99	0,45	10	22
QC	Fermont	CBMRT	9	9	52	-3,0	6,94	0,46	9	19
QC	Forestville	CFTF-TV-4	4	4	20000	2,0	8,34	0,63	220	2053
QC	Gaspé	CHAU-TV-6	7	7	1600	0,0	0,00	0,43	93	85
QC	Gaspé	CBGAT-17	9	9	3700	8,9	4,93	4,64	86	717
QC	Grande-Vallée	CBGAT-3	6	6	42	2,0	5,88	0,44	8	42
QC	Harrington-Harbour	CBST-11	8	8	46	-3,0	2,77	0,44	54	46
QC	Harrington-Harbour	CBMUT	13	13	46	-3,0	2,77	0,44	54	46
QC	Havre-St-Pierre	CBST-1	12	12	440	-3,0	0,00	0,41	11	5
QC	Iles-de-la-Madeleine	CBMYT	7	7	22500	6,1	3,34	2,29	247	1280
QC	Iles-de-la-Madeleine	CBIMT	12	12	22500	8,9	3,33	2,29	158	1563
QC	Jonquière	CKTV-TV	12	12	1100	11,8	3,74	1,57	44	1100
QC	Joutel	CJDG-TV-3	11	11	310	-3,0	7,22	0,54	59	138
QC	La Tabatière	CBMLT	10	10	12	-3,0	5,09	0,45	8	12
QC	La Tuque	CBMET	9	9	32	-3,0	4,83	0,43	23	32
QC	Lac-Mégantic	CBVT-3	12	12	210	-3,0	7,16	0,46	89	210
QC	L'Anse-à-Valleau	CHAU-TV-9	12	12	75	-3,0	3,94	0,43	12	13
QC	Longue-Pointe-de-Mingan	CBST-18	6	6	150	-3,0	9,09	0,40	40	150
QC	Malartic	CBVD-TV	5	5	7200	8,1	3,12	0,92	310	3324
QC	Matagami	CJDG-TV-4	9	9	60	-3,0	7,55	0,48	24	60
QC	Matane	CBGAT	6	6	5300	2,0	2,96	0,77	469	1228
QC	Mont-Climont	CBGAT-1	13	13	19000	1,7	3,94	0,42	92	307
QC	Mont-Tremblant	CBFT-1	11	11	1900	6,1	5,44	8,86	385	713
QC	Murdochville	CBGAT-2	10	10	4700	8,9	4,48	9,21	289	754
QC	Percé	CBGAT-20	11	11	4500	6,1	4,41	0,85	486	4500
QC	Percé	CHAU-TV-5	13	13	4500	8,9	4,40	0,85	256	4500
QC	Port-Daniel	CBGAT-21	7	7	100	-3,0	6,02	0,46	56	100
QC	Radisson	CBFRT	8	8	460	-3,0	5,05	0,49	60	86
QC	Radisson	CFBJ-TV	10	10	68	-3,0	9,52	0,42	11	46
QC	Radisson	CJBJ-TV	13	13	36	-3,0	9,70	0,46	7	27
QC	Rimouski	CFER-TV	11	11	3300	11,8	2,71	0,84	142	3300
QC	Rivière-au-Renard	CHAU-TV-7	4	4	4700	2,0	6,51	0,60	150	924

PR	CITY	CALL SIGN	DTV CH	NTSC CH	ERP IC Plan (Watt)	NTSC AVG Antenna Gain (dB)	NTSC Peak to AVG (dB)	NTSC System losses (dB)	ATSC TX Power Considered (Watt)	ERP Considered (Watt)
QC	Rivière-au-Tonnerre	CBST-6	7	7	5700	6,1	3,57	1,27	154	1066
QC	Rivière-du-Loup	CKRT-TV	7	7	6500	8,9	0,00	0,87	1024	6500
QC	Rivière-du-Loup	CIMT-TV	9	9	6000	11,8	2,04	0,93	307	6000
QC	Rivière-St-Paul	CBMPT	11	11	75	-3,0	7,17	0,48	12	27
QC	Roberval	CJPM-TV-1	10	10	36000	8,9	2,57	1,33	406	4195
QC	Rouyn-Noranda	CIVA-TV-1	8	8	17000	11,8	3,20	1,76	807	17000
QC	Rouyn-Noranda	CFEM-TV	13	13	20000	11,8	3,19	1,76	952	20000
QC	Schefferville	CBSET-1	7	7	20	-3,0	6,99	0,42	9	20
QC	Schefferville	CBFT-8	9	9	21	-3,0	6,99	0,40	9	21
QC	Sept-Îles	CFER-TV-2	5	5	3000	8,1	6,38	0,86	130	3000
QC	Sept-Îles	CFTF-TV-7	7	7	18000	1,7	8,14	0,52	115	978
QC	Sept-Îles	CIVG-TV	9	9	19000	8,9	4,07	1,03	1215	19000
QC	Sept-Îles	CBST	13	13	12500	11,8	3,77	1,39	129	3385
QC	Sherbrooke	CHLT-TV	7	7	4000	11,8	2,47	0,69	175	4000
QC	Sherbrooke	CKSH-TV	9	9	4000	11,8	4,59	0,74	109	4000
QC	Sherbrooke	CKMI-TV-2	11	11	1000	8,9	2,75	0,85	83	1000
QC	Ste-Anne-des-Monts	CBGAT-11	8	8	34100	8,9	5,75	1,54	1122	22948
QC	Ste-Marguerite-Marie	CHAU-TV-1	3	3	5800	2,0	5,05	0,62	429	1884
QC	St-Fabien-de-Panet	CBVT-5	13	13	340	0,0	4,79	0,54	62	166
QC	Temiscaming	CBFST-2	12	12	14000	11,8	3,02	1,55	113	2404
QC	Trois-Rivières	CHEM-TV	8	8	11500	11,8	2,83	1,83	604	11500
QC	Trois-Rivières	CKTM-TV	13	13	5200	11,8	2,96	2,48	308	5200
QC	Val-d'Or	CJDG-TV	7	7	21500	8,9	1,90	1,55	1936	16285
QC	Val-d'Or	CFEM-TV-1	10	10	22000	8,9	2,00	1,55	1918	16517
QC	Val-d'Or	CIVA-TV	12	12	22000	11,8	2,10	1,55	1282	22000
QC	Waskaganish	CBFHT	9	9	370	-3,0	0,00	0,43	5	2
SK	Alticane	CIPA-TV-1	10	10	26300	11,8	2,95	1,23	380	8548
SK	Beauval	CBKBT	7	7	22100	8,9	6,17	5,70	143	1237
SK	Big River	CIPA-TV-2	7	7	80	-3,0	6,04	0,45	26	47
SK	Buffalo Narrows	CBKDT	11	11	400	1,7	1,25	0,62	94	161
SK	Carlyle Lake	CIEW-TV	7	7	7530	8,9	3,85	2,28	675	7530
SK	Colgate	CKCK-TV-1	12	12	36600	8,9	2,62	1,59	1533	15076
SK	Fond Du Lac	CBKAT-2	10	10	3200	1,7	7,78	0,48	148	1180
SK	Fort Qu'Appelle	CKCK-TV-7	7	7	438	-3,0	0,00	0,42	162	74
SK	Golden Prairie	CKMC-TV-1	10	10	33300	11,8	3,35	1,65	1488	33300

PR	CITY	CALL SIGN	DTV CH	NTSC CH	ERP IC Plan (Watt)	NTSC AVG Antenna Gain (dB)	NTSC Peak to AVG (dB)	NTSC System losses (dB)	ATSC TX Power Considered (Watt)	ERP Considered (Watt)
SK	Greenwater Lake	CBKST-11	4	4	4900	8,1	2,71	0,89	293	2877
SK	Hudson Bay	CBKT-10	9	9	141	0,0	2,22	0,48	95	141
SK	Hudson Bay	CICC-TV-3	11	11	124	0,0	2,20	0,49	84	124
SK	Ile-A-La-Crosse	CBKCT	9	9	400	-3,0	8,79	0,60	36	120
SK	Island Falls	CBWBT-2	7	7	700	0,0	8,26	0,57	60	353
SK	La Loche	CBKDT-2	13	13	7800	0,0	10,70	0,44	151	1600
SK	La Ronge	CBKST-2	12	12	5600	-3,0	5,96	0,45	127	226
SK	Leoville	CBKST-3	12	12	46700	8,9	3,02	1,38	1027	11629
SK	Meadow Lake	CBCS-TV-1	8	8	17600	11,8	3,03	1,54	179	3824
SK	Montreal Lake	CBKST-5	11	11	300	0,0	5,53	0,46	93	300
SK	Moose Jaw	CBKT-1	4	4	4000	8,1	3,19	0,88	364	4000
SK	Moose Jaw	CKMJ-TV	7	7	16700	8,9	2,48	2,03	1941	16700
SK	Nipawin	CBKST-15	10	10	49900	11,8	2,66	5,43	150	1197
SK	Nipawin	CKBQ-TV-1	12	12	1100	8,9	3,32	5,43	230	1100
SK	Norquay	CICC-TV-2	7	7	8300	11,8	2,16	1,11	431	8300
SK	Norquay	CBKT-9	13	13	96700	6,1	2,22	1,15	761	3967
SK	North Battleford	CFQC-TV-2	6	6	8000	5,0	2,56	0,75	1114	5340
SK	North Battleford	CBKST-10	7	7	8500	8,9	1,02	1,10	1114	8500
SK	Palmbere Lake	CBKDT-1	8	8	60	0,0	5,17	0,49	20	60
SK	Pelican Narrows	CBWBT-3	5	5	9600	0,0	6,77	0,46	83	353
SK	Prince Albert	CBKST-9	5	5	4200	8,1	0,00	0,90	801	4200
SK	Prince Albert	CIPA-TV	9	9	19200	11,8	3,51	1,42	784	19200
SK	Regina	CBKT	9	9	20800	11,8	2,52	1,92	1196	20800
SK	Regina	CFRE-TV	11	11	10600	11,8	3,48	2,46	554	10600
SK	Regina	CBKFT	13	13	28500	11,8	3,58	1,73	1228	28500
SK	Riverhurst	CBKT-5	10	10	128	0,0	2,60	0,59	78	125
SK	Saskatoon	CFQC-TV	8	8	13400	13,5	2,57	1,76	498	13400
SK	Saskatoon	CBKST	11	11	16000	13,5	0,00	1,61	1035	16000
SK	Saskatoon	CBKFT-1	13	13	20000	8,9	4,83	1,42	1175	20000
SK	Shaunavon	CBCP-TV-1	7	7	22000	13,5	3,01	11,58	506	1577
SK	Southend	CBKST-8	13	13	160	-3,0	14,44	0,46	13	160
SK	St Brieux	CBKFT-4	7	7	128	-3,0	0,00	0,47	83	37
SK	Stanley Mission	CBKST-4	8	8	440	0,0	5,26	0,41	144	440
SK	Stony Rapids	CBKAT-3	7	7	300	1,7	5,54	0,59	65	300
SK	Stranraer	CBKST-1	9	9	5600	11,8	2,97	2,63	342	5600
SK	Swift Current	CBKT-4	5	5	2600	5,0	0,00	0,73	926	2476

PR	CITY	CALL SIGN	DTV CH	NTSC CH	ERP IC Plan (Watt)	NTSC AVG Antenna Gain (dB)	NTSC Peak to AVG (dB)	NTSC System losses (dB)	ATSC TX Power Considered (Watt)	ERP Considered (Watt)
SK	Swift Current	CKMC-TV	12	12	12600	8,9	2,94	1,23	1094	12600
SK	Uranium City	CBKAT	8	8	30	-3,0	5,95	0,46	5	9
SK	Willow Bunch	CKCK-TV-2	6	6	3272	8,1	2,89	1,01	329	3272
SK	Willow Bunch	CBKT-2	10	10	14200	11,8	4,74	1,64	362	11186
SK	Wynyard	CBKT-8	6	6	1700	8,1	0,00	0,89	323	1700
SK	Wynyard	CIWH-TV	12	12	32400	8,9	3,98	1,42	1782	24954
SK	Yorkton	CBKT-6	5	5	9800	8,1	0,00	0,93	1740	9076
SK	Yorkton	CICC-TV	10	10	12600	8,9	0,00	1,37	1493	8461
YT	Dawson	CBDDT	7	7	440	-3,0	4,05	0,43	143	166
YT	Watson Lake	CBDAT	8	8	400	-3,0	7,35	0,43	23	57
YT	Whitehorse	CFWH-TV	6	6	1030	0,0	2,58	0,42	105	173
YT	Whitehorse	CBFT-15	7	7	3820	0,0	3,00	0,48	69	124
YT	Whitehorse	CHWT-TV	11	11	60	-3,0	0,00	0,40	76	35

Total = 362

Different Channel

L-VHF to L-VHF

PR	CITY	CALL SIGN	DTV CH	NTSC CH	ERP IC Plan (Watt)	NTSC AVG Antenna Gain (dB)	NTSC Peak to AVG (dB)	NTSC System losses (dB)	ATSC TX Power Considered (dB)	ERP Considered (dB)
AB	Oyen	CFCN-TV-16	5	2	230	2	1,19	0,43	104	197
AB	Slave Lake	CFRN-TV-9	5	4	1900	0	4,19	0,40	58	139

Total = 2

H-VHF to H-VHF

PR	CITY	CALL SIGN	DTV CH	NTSC CH	ERP IC Plan (Watt)	NTSC AVG Antenna Gain (dB)	NTSC Peak to AVG (dB)	NTSC System losses (dB)	ATSC TX Power Considered (Watt)	ERP Considered (Watt)
AB	Whitecourt	CBXT-2	7	9	3900	8,9	3,01	0,91	192	2416
MB	Dauphin	CBWST	9	8	6600	11,8	3,98	1,59	251	6600
ON	Chapleau	CITO-TV-4	8	9	450	0,0	6,16	0,52	64	237
ON	Sault Ste Marie	CIII-TV-12	7	12	410	8,9	4,44	4,32	51	410

PR	CITY	CALL SIGN	DTV CH	NTSC CH	ERP IC Plan (Watt)	NTSC AVG Antenna Gain (dB)	NTSC Peak to AVG (dB)	NTSC System losses (dB)	ATSC TX Power Considered (Watt)	ERP Considered (Watt)
QC	Baie-Comeau	CBST-19	10	7	750	6,1	3,95	2,05	102	642

Total = 5

UHF to UHF

PR	CITY	CALL SIGN	DTV CH	NTSC CH	ERP IC Plan (Watt)	NTSC AVG Antenna Gain (dB)	NTSC Peak to AVG (dB)	NTSC System losses (dB)	ATSC TX Power Considered (Watt)	ERP Considered (Watt)
AB	Burmis	CBRT-8	32	47	110	12,3	3,94	2,24	2	56
AB	Burmis	CJIL-TV-2	51	55	120	12,3	3,81	2,08	3	75
AB	Forestburg	CBXT-12	35	52	16000	14,1	0,00	1,82	88	1488
AB	Plamondon/Lac Labiche	CBXFT-9	21	22	4800	9,3	6,23	1,81	37	863
BC	Chilliwack	CBUFT-6	15	14	2700	9,3	2,58	1,80	2	25
BC	Fraser Valley	CHNU-TV	47	66	450000	9,3	4,29	1,00	274	4979
BC	Spillimacheen	CBUBT-6	39	69	340000	9,3	12,96	1,29	12	1456
NS	Digby	CBHFT-6	17	58	2200	6,3	4,60	2,56	37	250
NS	Digby	CBHT-7	19	52	2000	6,3	4,60	2,67	43	288
NS	Truro	CBHT-8	42	55	6200	9,3	4,03	2,09	58	767
ON	Barrie	CBLFT-11	42	55	3800	14,1	2,81	2,37	27	780
ON	Belleville	CICO-TV-53	26	53	850000	12,3	3,30	2,77	795	15248
ON	Brighton	CKWS-TV-1	30	66	5500	12,3	4,11	1,48	30	947
ON	Chatham	CICO-TV-59	33	59	4200	12,3	0,00	3,46	211	1613
ON	Chatham	CBLN-TV-3	42	64	3700	9,3	7,21	3,93	31	560
ON	Cloyne	CICO-TV-92	44	55	12000	14,1	3,10	2,48	405	12000
ON	Fort Erie	CIII-TV-55	48	55	105000	14,1	5,20	2,08	56	2958
ON	Foymount	CBOT-1	14	59	1000000	12,3	3,62	1,06	156	4777
ON	Kingston	CBLFT-14	36	32	650000	14,1	2,78	2,37	517	14576
ON	Mattawa	CBLFT-27	43	26	18000	9,3	7,76	2,86	40	1039
ON	Maynooth	CBOT-4	48	51	210	9,3	0,80	1,22	8	59
ON	Mcarthur's Mills	CICO-TV-93	46	42	850000	9,3	3,01	1,74	1177	13415
ON	Muskoka	CHCH-TV-3	23	67	800000	17,1	5,31	2,71	1966	183653
ON	Normandale	CBLN-TV-6	42	44	295	9,3	2,24	2,05	23	201
ON	North Bay	CHCH-TV-6	22	32	230	9,3	0,00	2,62	24	114
ON	Parry Sound	CICE-TV-11	31	42	270	9,3	0,93	1,89	31	209
ON	Pembroke	CHLF-TV-13	16	17	1000000	14,1	2,92	3,08	386	9560
ON	Pembroke	CICE-TV-16	28	29	1000000	14,1	2,97	3,08	531	13307

PR	CITY	CALL SIGN	DTV CH	NTSC CH	ERP IC Plan (Watt)	NTSC AVG Antenna Gain (dB)	NTSC Peak to AVG (dB)	NTSC System losses (dB)	ATSC TX Power Considered (Watt)	ERP Considered (Watt)
ON	Pembroke	CJOH-TV-47	36	47	1000000	14,1	2,79	1,84	2476	79204
ON	Penetanguishene	CICA-TV-51	29	51	1000000	14,1	2,46	1,62	499	15548
ON	Peterborough	CFTO-TV-54	35	54	850000	14,1	0,00	2,67	2080	28900
ON	Peterborough	CBLFT-12	42	44	1700	14,1	2,77	2,98	69	1700
ON	Prescott	CKWS-TV-2	48	26	220	9,3	2,12	2,56	29	220
ON	Sarnia	CKCO-TV-3	27	42	810000	17,1	1,43	2,65	1729	66974
ON	Sarnia-Oil Springs	CBLFT-17	17	68	7900	12,3	1,62	2,22	133	1974
ON	Smiths Falls	CKWS-TV-3	47	36	1000	12,3	0,00	1,80	34	379
ON	Temagami	CBCQ-TV-1	18	15	51000	14,1	3,07	1,79	34	1178
ON	Wiarton	CBLN-TV-5	35	20	1000000	14,1	5,01	2,72	1967	85609
PE	Charlottetown	CBAFT-5	32	31	845000	14,1	4,47	2,62	770	30327
QC	Chicoutimi	CBJET	21	58	5500	12,3	0,79	2,70	38	414
QC	Lac-Etchemin	CBVT-4	22	55	2200	9,3	7,91	1,85	2	85
QC	New-Carlisle	CBVN-TV	38	45	22000	9,3	3,28	2,03	58	653
QC	Port-Daniel	CBVF-TV	19	16	250	6,3	2,88	1,61	9	54
QC	Sherbrooke	CFKS-TV	41	30	53000	14,1	0,00	1,32	457	8674
QC	Ste-Famille	CBVT-2	43	55	5000	6,3	4,67	1,35	38	343
QC	Thetford-Mines	CBVT-9	23	21	1500	6,3	1,47	1,98	14	55
QC	Thetford-Mines	CBMT-4	42	32	1500	6,3	1,47	1,98	21	81
QC	Trois-Rivières	CFKM-TV	34	16	580000	14,1	3,01	4,73	1646	28482
QC	Trois-Rivières	CIVC-TV	46	45	240000	17,1	3,62	2,78	2560	159415

Total = 49

DIFFERENT CHANNEL

PR	CITY	CALL SIGN	DTV CH	NTSC CH	ERP IC Plan (Watt)	New antenna model	New antenna gain(x)	line type	system losses(dB)	**TX power (Watt)**
AB	Burmis	CISA-TV-1	9	3	460	CRUCIS Series II , 6-bay	5,15	1-5/8''	1,4745	**125**
AB	Coutts/Milkriver	CBRT-16	9	4	1500	CRUCIS Series II , 6-bay	5,15	1-5/8''	1,9935	**461**
AB	High Prairie	CBXAT-2	39	2	1000000	RFT Chromastar 32-bay	54,35	5''	1,1535	**23997**
AB	Hinton	CBXFT-7	13	3	1100	CRUCIS Series II , 6-bay	5,15	1-5/8''	1,3361	**291**
AB	Lac La Biche	CFRN-TV-5	7	2	3500	CRUCIS Series II , 6-bay	5,15	1-5/8''	2,4606	**1198**
AB	Lethbridge	CKAL-TV-1	46	2	1000000	RFT Chromastar 32-bay	54,35	5''	1,6956	**27187**
AB	Lloydminster	CKSA-TV	13	2	19000	CRUCIS Series II , 12-bay	11,2	1-5/8''	4,2944	**4560**
AB	Medicine Hat	CHAT-TV	36	6	1000000	RFT Chromastar 32-bay	54,35	5''	1,50795	**26037**

PR	CITY	CALL SIGN	DTV CH	NTSC CH	ERP IC Plan (Watt)	New antenna model	New antenna gain(x)	line type	system losses(dB)	**TX power (Watt)**
AB	Peace River	CFRN-TV-2	15	3	1000000	RFT Chromastar 32-bay	54,35	5''	1,20215	**24267**
AB	Pivot	CHAT-TV-1	13	4	5700	CRUCIS Series II , 6-bay	5,15	1-5/8''	3,5678	**2517**
AB	Red Deer	CHCA-TV	28	6	1000000	RFT Chromastar 32-bay	54,35	5''	1,57745	**26457**
AB	Red Deer	CKEM-TV-1	45	4	1000000	RFT Chromastar 32-bay	54,35	5''	1,3759	**25258**
BC	100 Mile House	CITM-TV	7	3	1200	CRUCIS Series II , 6-bay	5,15	1-5/8''	1,5783	**335**
BC	Burns Lake	CBCY-TV-1	32	4	610000	RFT Chromastar 32-bay	54,35	4''	1,0404	**14262**
BC	Chilliwack	CBUT-2	7	3	20000	CRUCIS Series II , 6-bay	5,15	1-5/8''	1,3188	**5261**
BC	Creston	CBUCT-2	7	3	970	CRUCIS Series II , 6-bay	5,15	1-5/8''	1,6648	**276**
BC	Houston	CBCY-TV	22	2	150000	Delphinus ALP 12-bay	20,4	3''	1,5401	**10483**
BC	Kamloops	CHKM-TV	11	6	43000	CRUCIS Series II , 12-bay	11,2	1-5/8''	1,4745	**5391**
BC	Kamloops	CFJC-TV	13	4	43000	CRUCIS Series II , 12-bay	11,2	1-5/8''	1,4745	**5391**
BC	Kelowna	CHBC-TV	8	2	2000	CRUCIS Series II , 6-bay	5,15	1-5/8''	1,3534	**530**
BC	Kelowna	CHKL-TV	24	5	95000	Delphinus ALP 12-bay	20,4	3''	1,2145	**6159**
BC	Nelson	CKTN-TV-3	7	3	440	CRUCIS Series II , 6-bay	5,15	1-5/8''	1,6302	**124**
BC	Oliver/Osoyoos	CKKM-TV	12	3	1000	CRUCIS Series II , 6-bay	5,15	1-5/8''	1,4572	**272**
BC	Pemberton	CBUPT	7	4	14000	CRUCIS Series II , 6-bay	5,15	1-5/8''	1,3707	**3727**
BC	Prince George	CBUFT-4	14	4	750	Carina AL8 8-bay	15,39	1-5/8''	1,3361	**66**
BC	Prince George	CKPG-TV	34	2	560000	RFT Chromastar 32-bay	54,35	4''	1,2484	**13735**
BC	Prince Rupert	CFTK-TV-1	7	6	1100	CRUCIS Series II , 6-bay	5,15	1-5/8''	1,6994	**316**
BC	Salmon Arm	CBUT-43	33	3	30000	Carina ALP 8-bay	14,45	1-5/8''	2,2357	**3474**
BC	Terrace	CFTK-TV	35	3	150000	RFT Chromastar 32-bay	54,35	3''	0,9549	**3439**
MB	Brandon	CKX-TV	49	5	218000	RFT Chromastar 32-bay	54,35	4''	4,4412	**11153**
MB	Brandon	CKYB-TV	50	4	216100	RFT Chromastar 32-bay	54,35	4''	4,4412	**11055**
MB	Flin Flon	CBWFT-2	8	3	69	CRUCIS Series II , 2-bay	1,1	1-5/8''	1,8724	**97**
MB	Lac Du Bonnet	CBWT-2	21	4	1000000	RFT Chromastar 32-bay	54,35	5''	1,2925	**24777**
MB	Mafeking	CBWYT	10	2	20000	CRUCIS Series II , 6-bay	5,15	1-5/8''	2,8239	**7441**
MB	Mccreary	CKX-TV-3	19	11	850000	RFT Chromastar 32-bay	54,35	4''	0,9156	**19310**
MB	Minnedosa	CKND-TV-2	44	2	241000	Carina ALP 32-bay	54,35	4''	4,4932	**12478**
MB	Ste Rose Du Lac	CBWFT-4	14	3	201200	Carina ALP 32-bay	54,35	3''	1,1943	**4874**
MB	Thompson	CBWFT-5	11	5	276	CRUCIS Series II , 6-bay	1,1	1-5/8''	1,5091	**355**
NB	Allardville	CBAFT-3	36	3	845000	RFT Chromastar 32-bay	54,35	5''	1,4732	**21826**
NB	Campbellton	CKCD-TV	21	7	846000	RFT Chromastar 32-bay	54,35	5''	0,9172	**19226**
NB	Campbellton	CBAT-TV-4	34	4	205000	RFT Chromastar 32-bay	54,35	3''	0,8352	**4572**
NB	Florenceville	CKLT-TV-1	24	3	845000	RFT Chromastar 32-bay	54,35	5''	0,6948	**18245**
NB	Fredericton	CBAFT-1	31	5	845000	RFT Chromastar 32-bay	54,35	5''	1,28555	**20903**
NB	Fredericton	CIHF-TV-1	44	11	603000	RFT Chromastar 32-bay	54,35	4''	1,446	**15478**
NB	Moncton	CKCW-TV	29	2	742000	RFT Chromastar 32-bay	54,35	4''	1,6852	**20124**

PR	CITY	CALL SIGN	DTV CH	NTSC CH	ERP IC Plan (Watt)	New antenna model	New antenna gain(x)	line type	system losses(dB)	**TX power (Watt)**
NB	Saint John	CBAT-TV	42	4	274000	RFT Chromastar 32-bay	54,35	3''	1,2342	**6698**
NF	Argentia	CJOM-TV	45	3	850000	RFT Chromastar 32-bay	54,35	5''	1,03535	**19850**
NF	Baie Verte	CBNAT-1	22	3	850000	RFT Chromastar 32-bay	54,35	5''	1,16045	**20430**
NF	Bonne Bay	CBYT-3	50	2	850000	RFT Chromastar 32-bay	54,35	5''	0,88245	**19163**
NF	Grand Bank	CJOX-TV-1	43	2	850000	RFT Chromastar 32-bay	54,35	5''	1,0284	**19818**
NF	Grand Falls	CJCN-TV	44	4	850000	RFT Chromastar 32-bay	54,35	5''	1,1674	**20463**
NF	Hawke's Bay	CBYT-9	24	4	41000	Carina ALP 8-bay	14,45	1-5/8''	1,1804	**3724**
NF	Hermitage	CBNT-24	24	4	845000	RFT Chromastar 32-bay	54,35	5''	0,5975	**17841**
NF	Port Aux Basques	CBYT-4	25	3	59900	Delphinus ALP 12-bay	20,4	1-5/8''	1,8032	**4448**
NF	St John's	CBFJ-TV	17	4	5400	Carina AL8 8-bay	15,39	1-5/8''	2,1838	**580**
NF	St John's	CJON-TV	42	6	850000	RFT Chromastar 32-bay	54,35	5''	1,09095	**20105**
NF	Stephenville	CJSV-TV	14	4	850000	RFT Chromastar 32-bay	54,35	5''	0,6531	**18177**
NF	Trepassey	CBNT-39	17	4	30800	Carina ALP 8-bay	14,45	1-5/8''	1,3188	**2888**
NS	Caledonia	CBHT-9	30	2	803	Carina AL8 8-bay	15,39	1-5/8''	1,4572	**73**
NS	Cheticamp	CBIT-2	50	2	850000	RFT Chromastar 32-bay	54,35	5''	0,7782	**18709**
NS	New Glasgow	CBHT-5	47	4	850000	RFT Chromastar 32-bay	54,35	5''	0,93805	**19410**
NS	Port Hawkesbury	CJCB-TV-6	41	3	850000	RFT Chromastar 32-bay	54,35	5''	0,93805	**19410**
NS	Sheet Harbour	CJCH-TV-5	44	2	33700	Carina ALP 8-bay	14,45	1-5/8''	1,561	**3341**
NS	Shelburne	CIHF-TV-9	28	10	11300	Carina AL8 8-bay	15,39	1-5/8''	2,3741	**1268**
NS	Sydney	CJCB-TV	14	4	850000	RFT Chromastar 32-bay	54,35	5''	0,9311	**19379**
NS	Sydney	CBIT	36	5	850000	RFT Chromastar 32-bay	54,35	5''	1,1813	**20528**
NS	Yarmouth	CBHFT-1	50	3	850000	RFT Chromastar 32-bay	54,35	5''	1,45235	**21850**
ON	Bancroft	CIII-TV-2	8	2	4700	CRUCIS Series II , 6-bay	5,15	1-5/8''	5,9206	**3567**
ON	Barrie	CKVR-TV	10	3	7100	CRUCIS Series II , 6-bay	5,15	1-5/8''	5,8687	**5325**
ON	Chatham	CBLFT-10	12	48	300	CRUCIS Series II , 2-bay	1,1	1-5/8''	4,2252	**722**
ON	Cornwall	CJOH-TV-8	45	8	1000000	RFT Chromastar 32-bay	54,35	5''	1,81375	**27937**
ON	Deseronto	CJOH-TV-6	49	6	850000	RFT Chromastar 32-bay	54,35	5''	1,59135	**22561**
ON	Elliot Lake	CICI-TV-1	30	3	1000000	RFT Chromastar 32-bay	54,35	5''	0,9589	**22945**
ON	Hearst	CITO-TV-3	42	4	1000000	RFT Chromastar 32-bay	54,35	5''	1,41065	**25460**
ON	Huntsville	CBLT-TV-2	45	8	850000	RFT Chromastar 32-bay	54,35	5''	1,5705	**22453**
ON	Kapuskasing	CBLT-9	17	2	1000000	RFT Chromastar 32-bay	54,35	5''	1,32725	**24976**
ON	Kearns	CBLT-8	28	2	1000000	RFT Chromastar 32-bay	54,35	5''	1,3064	**24857**
ON	Kenora	CBWFT-7	50	2	1000000	RFT Chromastar 32-bay	54,35	5''	1,1535	**23997**
ON	North Bay	CFGC-TV-2	32	2	1000000	RFT Chromastar 32-bay	54,35	5''	1,24385	**24501**
ON	North Bay	CBLT-4	38	4	1000000	RFT Chromastar 32-bay	54,35	5''	1,56355	**26373**
ON	Owen Sound	CIII-TV-4	26	4	1000000	RFT Chromastar 32-bay	54,35	5''	1,4037	**25420**
ON	Pembroke	CBOT-6	39	3	1000000	RFT Chromastar 32-bay	54,35	5''	1,7234	**27362**

PR	CITY	CALL SIGN	DTV CH	NTSC CH	ERP IC Plan (Watt)	New antenna model	New antenna gain(x)	line type	system losses(dB)	**TX power (Watt)**
ON	Pembroke	CHRO-TV	51	5	1000000	RFT Chromastar 32-bay	54,35	5''	1,60525	**26627**
ON	Sault Ste Marie	CHBX-TV	13	2	28000	CRUCIS Series II , 12-bay	11,2	1-5/8''	3,3256	**5377**
ON	Sault Ste Marie	CBLT-5	21	5	1000000	RFT Chromastar 32-bay	54,35	5''	1,4454	**25665**
ON	Sudbury	CICI-TV	8	5	8500	CRUCIS Series II , 12-bay	11,2	1-5/8''	6,0071	**3026**
ON	Thunder Bay	CHFD-TV	46	4	350000	RFT Chromastar 32-bay	54,35	4''	2,6316	**11804**
ON	Thunder Bay	CKPR-TV	49	2	350000	RFT Chromastar 32-bay	54,35	4''	2,6316	**11804**
ON	Timmins	CITO-TV	48	3	1000000	RFT Chromastar 32-bay	54,35	5''	1,4593	**25747**
ON	Wiarton	CKCO-TV-2	17	2	1000000	RFT Chromastar 32-bay	54,35	5''	1,9875	**29077**
ON	Wingham	CKNX-TV	33	8	1000000	RFT Chromastar 32-bay	54,35	5''	1,779	**27714**
PE	St Edward	CBCT-1	26	4	19100	Carina AL8 8-bay	15,39	1-5/8''	1,734	**1850**
QC	Bearn/Fabre	CKRN-TV-3	7	3	35000	CRUCIS Series II , 6-bay	5,15	1-5/8''	1,4572	**9506**
QC	Blanc-Sablon	CBST-17	8	3	570	CRUCIS Series II , 2-bay	1,1	1-5/8''	2,3395	**888**
QC	Carleton	CBGAT-14	47	2	130000	Delphinus ALP 12-bay	20,4	3''	1,5667	**9141**
QC	Chibougamau	CBMCT	8	4	550	CRUCIS Series II , 2-bay	1,1	1-5/8''	1,8032	**757**
QC	Cloridorme	CHAU-TV-8	16	11	3100	Carina AL8 8-bay	15,39	1-5/8''	1,4745	**283**
QC	Jonquière	CFRS-TV	13	4	1300	CRUCIS Series II , 2-bay	1,1	1-5/8''	3,2564	**2501**
QC	La Tabatière	CBST-13	7	4	280	CRUCIS Series II , 6-bay	1,1	1-5/8''	1,4572	**356**
QC	La Tuque	CBFT-14	11	3	76000	Delphinus ALP 12-bay	20,4	1-5/8''	1,6648	**5466**
QC	Mont-Laurier	CBFT-2	44	3	1000000	RFT Chromastar 32-bay	54,35	5''	1,3064	**24857**
QC	Radisson	CH2440	7	6	640	CRUCIS Series II , 6-bay	15,39	1-5/8''	1,8205	**63**
QC	Rapides-des-Joachims	CBOFT-2	31	8	5000	Carina AL8 8-bay	15,39	1-5/8''	2,3222	**555**
QC	Rimouski	CJBR-TV	45	2	845000	RFT Chromastar 32-bay	54,35	4''	0,9572	**19381**
QC	Rivière-au-Renard	CBGAT-22	25	2	1000000	RFT Chromastar 32-bay	54,35	5''	0,68785	**21557**
QC	Rouyn-Noranda	CKRN-TV	9	4	14000	CRUCIS Series II , 12-bay	11,2	1-5/8''	4,5539	**3567**
QC	Sept-Îles	CBSET	11	3	16500	CRUCIS Series II , 6-bay	5,15	1-5/8''	2,5644	**5783**
QC	St-Michel-des-Saints	CBFT-3	31	7	845000	RFT Chromastar 32-bay	54,35	5''	1,32725	**21105**
QC	St-Pamphile	CBSPT	27	3	7400	Carina AL8 8-bay	15,39	1-5/8''	1,8897	**743**
SK	Cypress Hills	CBCP-TV-2	27	2	850000	RFT Chromastar 32-bay	54,35	5''	1,2925	**21061**
SK	Melfort	CKBQ-TV	36	2	850000	RFT Chromastar 32-bay	54,35	5''	1,4315	**21745**
SK	Ponteix	CBCP-TV-3	8	3	17000	CRUCIS Series II , 6-bay	5,15	3''	3,4489	**7304**
SK	Prince Albert	CBKFT-2	46	3	850000	RFT Chromastar 32-bay	54,35	5''	1,3481	**21332**
SK	Regina	CKCK-TV	8	2	29000	CRUCIS Series II , 12-bay	11,2	1-5/8''	4,2079	**6823**
SK	Saskatoon	CFSK-TV	42	4	1000000	RFT Chromastar 32-bay	54,35	5''	0,92415	**22762**
SK	Spiritwood	CBKST-13	38	2	850000	RFT Chromastar 32-bay	54,35	5''	1,084	**20073**
SK	Stranraer	CFQC-TV-1	51	3	1000000	RFT Chromastar 32-bay	54,35	5''	1,50795	**26037**
SK	Warmley	CBKT-7	46	3	258700	RFT Chromastar 32-bay	54,35	4''	3,89	**11657**

Total = 118

List of DTV stations per category for study 2

Transmitter category serving population greater than 300,000 people

PR	CITY	CALL SIGN	DTV CH	NTSC CH	ERP IC Plan (Watt)	NTSC AVG Antenna Gain (dB)	NTSC Peak to AVG (dB)	NTSC System losses (dB)	ATSC TX Power Considered (Watt)	ERP Considered (Watt)
AB	Calgary	CBRT	9	9	7000	11,8	2,61	2,23	423	7000
AB	Calgary	CIAN-TV	13	13	16000	6,1	6,15	13,69	455	327
AB	Calgary	CBRFT	16	16	1000000	12,3	2,30	3,51	5	59
AB	Calgary	CKCS-TV	27	32	1000000	12,3	0,00	2,48	80	562
AB	Calgary	CFCN-TV	29	4	1000000	N/A	N/A	N/A	25096	1000000
AB	Calgary	CJCO-TV	38	38	84000	14,1	0,00	2,48	376	5449
AB	Calgary	CICT-TV	41	2	830000	N/A	N/A	N/A	23113	830000
AB	Calgary	CHCA-TV-1	44	44	390000	12,3	2,08	2,54	67	1021
AB	Calgary	CKAL-TV	49	5	1000000	N/A	N/A	N/A	26798	1000000
AB	Edmonton	CBXT	11	5	49000	N/A	N/A	N/A	7487	49000
AB	Edmonton	CITV-TV	13	13	14000	13,5	0,00	2,25	795	10597
AB	Edmonton	CHCA-TV-2	17	17	850000	17,1	0,00	3,40	59	1377
AB	Edmonton	CKES-TV	23	45	4400	N/A	N/A	N/A	68	457
AB	Edmonton	CJAL-TV	26	9	1000000	N/A	N/A	N/A	1066	7245
AB	Edmonton	CBXFT	42	11	1000000	N/A	N/A	N/A	5298	151356
AB	Edmonton	CJEO-TV	44	56	850000	N/A	N/A	N/A	1666	7244
AB	Edmonton	CFRN-TV	47	3	1000000	N/A	N/A	N/A	28661	1000000
AB	Edmonton	CKEM-TV	51	51	1000000	17,1	0,00	2,04	649	20803
BC	Vancouver	CHAN-TV	8	8	650	11,8	2,98	1,01	27	650
BC	Vancouver	CKVU-TV	10	10	1100	13,5	0,00	0,84	60	1100
BC	Vancouver	CIVI-TV-2	17	17	50000	12,3	3,19	1,68	41	985
BC	Vancouver	CHNM-TV	20	42	53000	N/A	N/A	N/A	174	1550
BC	Vancouver	CBUFT	26	26	106000	14,1	2,91	1,69	24	818
BC	Vancouver	CIVT-TV	32	32	33000	17,1	4,50	1,28	256	27527
BC	Vancouver	CBUT	43	2	120000	N/A	N/A	N/A	494	4786
BC	Victoria	CHNU-TV-1	21	21	1700	14,1	3,45	1,66	18	3
BC	Victoria	CHNM-TV-1	29	29	1800	N/A	N/A	N/A	T.O	N/A
BC	Victoria	CIVI-TV	40	53	1000000	N/A	N/A	N/A	69	12
BC	Victoria	CHEK-TV	49	6	105000	N/A	N/A	N/A	3661	3661
MB	Winnipeg	CKY-TV	7	7	11700	13,5	0,00	2,40	909	795
MB	Winnipeg	CKND-TV	9	9	12300	13,5	1,51	2,34	664	576
MB	Winnipeg	CBWT	27	6	753000	N/A	N/A	N/A	25126	25126
MB	Winnipeg	CIIT-TV	35	35	1000000	17,1	0,00	3,88	43	8
MB	Winnipeg	CBWFT	51	3	762000	N/A	N/A	N/A	16415	8959
NS	Halifax	CBHFT	13	13	12200	6,1	4,76	3,62	124	24

PR	CITY	CALL SIGN	DTV CH	NTSC CH	ERP IC Plan (Watt)	NTSC AVG Antenna Gain (dB)	NTSC Peak to AVG (dB)	NTSC System losses (dB)	ATSC TX Power Considered (Watt)	ERP Considered (Watt)
NS	Halifax	CIHF-TV	26	8	845000	N/A	N/A	N/A	8148	2074
NS	Halifax	CBHT	39	3	845000	N/A	N/A	N/A	23607	23607
NS	Halifax	CJCH-TV	48	5	845000	N/A	N/A	N/A	23120	23120
ON	Hamilton	CHCH-TV	11	11	6100	13,5	1,50	2,66	356	356
ON	Hamilton	CKXT-TV-1	15	45	493000	N/A	N/A	N/A	48	12
ON	Hamilton	CITS-TV	36	36	493000	17,1	3,32	2,50	1566	305
ON	Kitchener	CKCO-TV	13	13	12000	13,5	0,00	1,83	818	728
ON	Kitchener	CBLFT-8	17	61	115000	N/A	N/A	N/A	3013	704
ON	Kitchener	CICO-TV-28	28	28	885000	14,1	2,15	4,21	1171	228
ON	Kitchener	CBLN-TV-1	29	56	110000	N/A	N/A	N/A	6469	2730
ON	London	CBLFT-9	7	53	10000	N/A	N/A	N/A	346	98
ON	London	CFPL-TV	10	10	10100	14,7	0,00	2,44	600	600
ON	London	CICO-TV-18	18	18	1200	12,3	0,00	4,43	189	37
ON	London	CJMT-TV-1	20	20	25000	17,1	1,24	2,88	24	5
ON	London	CHCH-TV-2	24	51	850000	N/A	N/A	N/A	5383	4393
ON	London	CITS-TV-2	38	14	1700	N/A	N/A	N/A	22	4
ON	London	CFMT-TV-1	48	69	500000	N/A	N/A	N/A	4618	3161
ON	London	CBLN-TV	49	40	500000	N/A	N/A	N/A	10061	5678
ON	Oshawa	CHEX-TV-2	22	22	170	6,3	3,52	2,26	22	4
ON	Ottawa	CIII-TV-6	6	6	3500	5,0	7,59	0,54	218	163
ON	Ottawa	CBOFT	9	9	3500	11,8	2,94	1,93	183	183
ON	Ottawa	CJOH-TV	13	13	5300	11,8	2,61	1,57	275	275
ON	Ottawa	CJMT-TV-2	17	14	850000	N/A	N/A	N/A	3637	849
ON	Ottawa	CITY-TV-3	20	65	845000	N/A	N/A	N/A	3422	1004
ON	Ottawa	CHCH-TV-1	22	11	845000	N/A	N/A	N/A	13919	8871
ON	Ottawa	CICO-TV-24	24	24	535000	17,1	2,60	1,30	819	160
ON	Ottawa	CBOT	25	4	480000	N/A	N/A	N/A	15730	15730
ON	Ottawa	CFMT-TV-2	27	60	850000	N/A	N/A	N/A	10664	3285
ON	Ottawa	CITS-TV-1	42	32	850000	N/A	N/A	N/A	412	83
ON	Ottawa	CHRO-TV-43	43	43	845000	14,1	2,99	1,68	2287	446
ON	Toronto	CFTO-TV	9	9	2400	14,7	0,65	3,84	169	169
ON	Toronto	CICA-TV	19	19	106500	18,3	1,30	4,26	2747	536
ON	Toronto	CBLT	20	5	99600	N/A	N/A	N/A	2962	2962
ON	Toronto	CBLFT	25	25	99000	18,3	0,00	4,26	1512	295
ON	Toronto	CKXT-TV	40	52	107000	N/A	N/A	N/A	182	30
ON	Toronto	CIII-TV-41	41	41	100000	18,3	0,00	4,34	2486	485

PR	CITY	CALL SIGN	DTV CH	NTSC CH	ERP IC Plan (Watt)	NTSC AVG Antenna Gain (dB)	NTSC Peak to AVG (dB)	NTSC System losses (dB)	ATSC TX Power Considered (Watt)	ERP Considered (Watt)
ON	Toronto	CJMT-TV	44	69	1000000	N/A	N/A	N/A	3876	914
ON	Toronto	CFMT-TV	47	47	99000	18,3	0,00	4,34	3976	842
ON	Toronto	CITY-TV	51	57	23000	N/A	N/A	N/A	2570	662
ON	Windsor	CBET	9	9	26000	8,9	3,96	1,76	2019	515
ON	Windsor	CHWI-TV-60	25	60	40000	N/A	N/A	N/A	72	16
ON	Windsor	CICO-TV-32	32	32	350000	14,1	0,00	3,40	2018	393
ON	Windsor	CBEFT	35	54	1000000	N/A	N/A	N/A	1003	254
QC	Hull	CIVO-TV	30	30	406000	17,1	2,79	1,51	2007	391
QC	Hull	CFGS-TV	34	34	406000	14,1	2,33	2,44	675	132
QC	Hull	CHOT-TV	40	40	200000	17,1	2,70	1,44	952	186
QC	Montréal	CFTM-TV	10	10	11000	13,5	0,00	1,14	639	613
QC	Montréal	CFCF-TV	12	12	11000	13,5	0,00	1,12	635	613
QC	Montréal	CBFT	19	2	1000000	N/A	N/A	N/A	23159	23159
QC	Montréal	CBMT	21	6	900000	N/A	N/A	N/A	20284	20284
QC	Montréal	CIVM-TV	26	17	850000	N/A	N/A	N/A	6688	1595
QC	Montréal	CFTU-TV	29	29	4000	12,3	0,00	1,76	36	7
QC	Montréal	CFJP-TV	35	35	825000	17,1	0,00	1,21	1676	327
QC	Montréal	CJNT-TV	49	62	4000	N/A	N/A	N/A	37	21
QC	Montréal	CKMI-TV-1	51	46	845000	N/A	N/A	N/A	214	43
QC	Québec	CBVT	12	11	4900	N/A	N/A	N/A	1514	1514
QC	Québec	CIVQ-TV	15	15	1000000	17,1	0,00	1,75	2326	454
QC	Québec	CKMI-TV	20	20	153000	12,3	6,30	1,75	101	20
QC	Québec	CBVE-TV	25	5	1000000	N/A	N/A	N/A	4594	1201
QC	Québec	CFAP-TV	39	2	845000	N/A	N/A	N/A	22072	22072
QC	Québec	CFCM-TV	49	4	845000	N/A	N/A	N/A	21071	21071

Total = 95

Transmitter category serving population less than 300,000 people

Same DTV channel as NTSC

UHF

PR	CITY	CALL SIGN	DTV CH	NTSC CH	ERP IC Plan(Watt)	NTSC AVG Antenna Gain (dB)	NTSC Peak to AVG (dB)	NTSC System losses (dB)	ATSC TX Power Considered (Watt)	ERP Considered (Watt)
AB	Bow Island	CJIL-TV-1	39	39	12000	14,10	5,60	1,83	2	144
AB	Grande Prairie	CBXFT-8	19	19	2000	9,30	6,26	3,27	4	69
AB	Grouard Mission	CFRN-TV-8	18	18	4900	9,30	2,22	2,04	7	63
AB	Lethbridge	CBXFT-3	23	23	6000	12,30	2,31	4,71	1	7
AB	Lethbridge	CJIL-TV	17	17	8000	17,10	5,00	2,27	7	637
AB	Medicine Hat	CBXFT-11	34	34	220	12,30	6,23	3,72	0	15
AB	Red Deer	CBXFT-4	31	31	7500	18,30	2,20	3,63	1	58
AB	Red Deer	CBXT-13	22	22	1000000	17,10	2,60	1,67	202	12809
BC	Dawson Creek	CBUFT-5	33	33	1300	9,30	7,08	4,40	1	20
BC	Enderby	CBUT-44	26	26	340000	12,30	4,31	1,59	0	12
BC	Enderby	CHBC-TV-5	16	16	340000	6,30	9,65	1,79	1	23
BC	Fernie	CBUBT-8	21	21	300	6,30	10,28	0,91	0	2
BC	Kamloops	CBUFT-2	50	50	170	6,30	2,31	1,04	4	20
BC	Kelowna	CBUFT-1	21	21	360	9,30	2,52	1,06	1	15
BC	Kelowna	CBUT-38	45	45	95000	9,30	2,38	0,90	21	247
BC	New Denver	CBUCT-6	17	17	4100	9,30	5,39	1,75	1	10
BC	Penticton	CBUT-40	17	17	2200	6,30	4,24	1,19	3	24
BC	Radium Hot Springs	CBUBT-5	17	17	4100	6,30	13,62	1,66	0	19
BC	Vernon	CBUT-41	18	18	76000	6,30	3,66	1,02	4	35
BC	Wilson Creek	CHAN-TV-6	23	23	4500	12,30	3,61	1,20	5	136
MB	Brandon	CBWFT-10	21	21	13300	9,30	2,33	2,46	8	67
MB	Manigotagan	CBWGT-3	22	22	298	6,30	2,19	3,88	0	1
MB	Oak Lake	CBWFT-12	32	32	8200	12,30	0,99	2,23	19	241
MB	Piney	CBWT-3	29	29	1000000	12,30	8,33	1,79	62	4747
NB	Fredericton	CBAFT-10	19	19	13900	9,30	2,69	2,67	6	53
NB	Miramichi City	CIHF-TV-13	40	40	10100	12,30	2,29	1,68	23	441
NB	Moncton	CIHF-TV-3	27	27	99000	14,10	2,70	2,01	119	3590
NB	St-Stephen	CIHF-TV-12	21	21	2200	12,30	3,92	1,68	7	205
NB	Woodstock	CIHF-TV-11	38	38	4470	6,30	3,91	0,74	56	497
NS	Antigonish	CIHF-TV-15	21	21	3100	12,30	4,50	1,45	7	248
NS	Middleton	CBHFT-5	46	46	845000	14,10	2,43	1,93	183	5268

PR	CITY	CALL SIGN	DTV CH	NTSC CH	ERP IC Plan(Watt)	NTSC AVG Antenna Gain (dB)	NTSC Peak to AVG (dB)	NTSC System losses (dB)	ATSC TX Power Considered (Watt)	ERP Considered (Watt)
NS	Mulgrave	CIHF-TV-16	28	28	181	6,30	2,74	1,65	2	13
NS	New Glasgow	CBHFT-7	15	15	5800	9,30	4,73	1,60	6	110
NS	New Glasgow	CIHF-TV-8	34	34	3700	12,30	1,91	1,80	10	167
NS	Truro	CIHF-TV-4	18	18	3500	9,30	4,75	1,88	7	111
NS	Wolfville	CIHF-TV-5	20	20	846000	12,30	3,99	1,88	197	5438
NS	Yarmouth	CJCH-TV-7	40	40	4900	12,30	4,39	1,85	11	330
NS	Yarmouth	CIHF-TV-10	45	45	4900	14,10	4,49	2,46	18	725
ON	Barrie	CBLT-TV-1	16	16	1000000	14,10	7,45	3,53	209	13225
ON	Barry's Bay	CBOT-2	19	19	4700	9,30	4,72	2,72	4	55
ON	Belleville	CBLFT-13	15	15	300000	14,10	2,78	2,58	246	6632
ON	Fort Frances	CBWFT-11	15	15	4600	14,10	6,81	2,67	5	349
ON	Hawkesbury	CHLF-TV-2	39	39	1000	9,30	1,25	1,22	7	63
ON	Hawkesbury	CICO-TV-96	48	48	500	9,30	1,35	1,22	9	75
ON	Kenora	CICO-TV-91	44	44	1000000	14,10	2,99	2,45	129	3768
ON	Kingston	CICO-TV-38	38	38	850000	14,10	3,50	2,52	143	4607
ON	Little Current	CBCE-TV	16	16	1000000	17,10	3,98	2,50	11	791
ON	Manitouwage	CBLFT-25	15	15	1000000	12,30	7,52	2,97	17	803
ON	Mcarthur's Mills	CBOT-5	33	33	191	6,30	4,77	1,74	3	24
ON	Nipigon	CBLK-TV	16	16	2000	6,30	2,72	2,24	5	24
ON	Nipigon	CBLFT-19	26	26	2000	6,30	2,72	2,24	6	31
ON	Orillia	CFTO-TV-21	21	21	850000	14,10	0,00	2,71	284	3916
ON	Penetanguishene	CBLFT-15	34	34	4100	12,30	1,69	1,58	9	155
ON	Peterborough	CICO-TV-74	18	18	1000000	14,10	5,23	3,21	267	10914
ON	Peterborough	CIII-TV-27	27	27	375000	17,10	3,51	1,49	536	43674
ON	Sarnia	CBLN-TV-2	34	34	400	12,30	0,00	2,22	6	58
ON	Sarnia-Oil Springs	CIII-TV-29	29	29	450000	14,10	3,59	3,28	266	7350
ON	Sault Ste Marie	CBLFT-20	26	26	8000	6,30	4,77	2,50	4	28
ON	Sault Ste Marie	CHCH-TV-5	38	38	250	9,30	0,00	1,98	6	31
ON	Sault Ste Marie	CICO-TV-20	20	20	1000000	9,30	3,23	3,33	13	110
ON	Stevenson	CIII-TV-22	22	22	600000	14,10	7,18	2,06	294	24591
ON	Sudbury	CHCH-TV-4	41	41	4700	14,10	2,61	2,56	14	356
ON	Sudbury	CICO-TV-19	19	19	1000000	14,10	1,62	2,56	247	5117
ON	Sudbury	CHLF-TV-1	25	25	1000000	14,10	1,90	2,56	265	5854
ON	Wawa	CBLFT-23	16	16	5800	9,30	4,46	2,19	6	88
ON	Wheatley	CHWI-TV	16	16	540000	14,10	4,30	2,72	224	8278
ON	Wingham	CBLN-TV-4	45	45	1000000	17,10	0,00	1,88	667	22168
ON	Woodstock	CITY-TV-2	31	31	125000	17,10	0,00	2,21	562	17314

PR	CITY	CALL SIGN	DTV CH	NTSC CH	ERP IC Plan(Watt)	NTSC AVG Antenna Gain (dB)	NTSC Peak to AVG (dB)	NTSC System losses (dB)	ATSC TX Power Considered (Watt)	ERP Considered (Watt)
PE	Charlottetown	CIHF-TV-14	42	42	6400	12,30	1,92	1,68	23	410
QC	Alma	CBJET-1	32	32	1000	9,30	0,00	1,16	3	23
QC	Baie-Comeau	CBMIT	28	28	12600	9,30	3,86	1,66	6	91
QC	Carleton	CFTF-TV-11	44	44	195000	12,30	3,98	0,88	66	2297
QC	Carleton	CIVK-TV	15	15	140000	17,10	3,94	0,86	97	10145
QC	Chandler	CBVB-TV	23	23	4000	6,30	2,70	1,61	3	15
QC	Chapeau	CIVP-TV	23	23	15500	9,30	4,43	2,52	5	68
QC	Escuminac	CBVA-TV	18	18	3200	9,30	2,81	1,35	4	43
QC	Gascons	CIVK-TV-1	32	32	1000000	17,10	4,30	1,25	282	29245
QC	Gaspé	CBVG-TV	18	18	600	9,30	3,05	2,24	6	57
QC	Gaspé	CIVK-TV-3	35	35	550	9,30	3,60	2,24	6	69
QC	Grand-Fonds	CIVB-TV-1	31	31	95000	12,30	4,51	1,64	278	9141
QC	Ile du Havre Aubert	CBIMT-1	16	16	278	6,30	6,58	3,65	0	1
QC	Maniwaki	CBVU-TV	15	15	258	6,30	3,55	1,72	2	12
QC	Mont-Louis	CBGAT-10	19	19	1100	9,30	3,03	2,50	7	63
QC	Mont-St-Michel	CBFT-9	16	16	4200	9,30	5,23	2,17	3	60
QC	New-Richmond	CBVR-TV	27	27	4700	9,30	1,51	1,03	7	65
QC	Percé	CBVP-TV	14	14	600	9,30	4,60	1,72	3	55
QC	Percé	CIVK-TV-2	40	40	600	9,30	4,12	1,72	5	78
QC	Rimouski	CJPC-TV	18	18	183	9,30	4,50	1,62	0	5
QC	Rimouski	CIVB-TV	22	22	136000	17,10	0,00	1,03	471	19036
QC	Rivière-du-Loup	CFTF-TV	29	29	550000	9,30	4,41	1,06	43	799
QC	Rivière-St-Paul	CBST-16	21	21	52000	6,30	7,99	2,42	0	5
QC	Rouyn-Noranda	CFVS-TV-1	20	20	1000000	12,30	5,00	2,35	193	6030
QC	Sherbrooke	CBMT-3	50	50	4000	14,10	1,05	2,20	9	168
QC	Sherbrooke	CIVS-TV	24	24	62000	17,10	0,00	0,70	145	6348
QC	St-Fulgence	CKTV-TV-1	27	27	2000	9,30	4,72	1,62	1	11
QC	Stoneham	CBVT-8	44	44	5000	14,10	6,23	2,21	1	49
QC	St-René-de-Matane	CBGAT-7	30	30	9000	9,30	3,46	3,89	1	6
QC	Trois-Rivières	CBMT-1	28	28	700000	12,30	3,37	3,53	32	517
QC	Val-d'Or	CFVS-TV	25	25	1000000	14,10	5,47	2,44	170	8782
SK	Bellegarde	CBKFT-9	26	26	8970	14,10	2,33	2,24	6	154
SK	Debden	CBKFT-3	22	22	350	9,30	2,28	2,24	3	22
SK	Gravelbourg	CBKFT-6	39	39	2650	17,10	0,92	3,31	8	225
SK	Gravelbourg	CBKGT	45	45	2650	17,10	0,92	3,31	8	251
SK	Leoville	CBKFT-11	31	31	4900	14,10	6,02	2,51	6	359
SK	Moose Jaw	CBKFT-10	16	16	2240	12,30	0,92	2,85	0	3

PR	CITY	CALL SIGN	DTV CH	NTSC CH	ERP IC Plan(Watt)	NTSC AVG Antenna Gain (dB)	NTSC Peak to AVG (dB)	NTSC System losses (dB)	ATSC TX Power Considered (Watt)	ERP Considered (Watt)
SK	North Battleford	CBKFT-12	41	41	6900	12,30	5,19	2,21	10	352
SK	Ponteix	CBKFT-7	22	22	1820	17,10	0,92	3,52	6	158
SK	Willow Bunch	CBKFT-8	21	21	2261	12,30	4,67	2,58	6	171
SK	Zenon Park	CBKFT-5	21	21	7300	9,30	2,71	2,24	4	39

Total = 109

VHF

PR	CITY	CALL SIGN	DTV CH	NTSC CH	ERP IC Plan (Watt)	NTSC AVG Antenna Gain (dB)	NTSC Peak to AVG (dB)	NTSC System losses (dB)	ATSC TX Power Considered (Watt)	ERP Considered (Watt)
AB	Ashmont	CFRN-TV-4	12	12	24000	6,1	2,61	1,69	174	878
AB	Athabasca	CBXT-1	8	8	46000	11,8	2,98	1,48	87	1851
AB	Athabasca	CFRN-TV-12	13	13	880	8,9	2,63	6,96	57	164
AB	Bonnyville	CBXFT-1	6	6	8000	8,1	1,74	0,91	740	5777
AB	Bonnyville	CKSA-TV-2	9	9	24000	11,8	3,01	1,58	65	1362
AB	Burmis	CFCN-TV-4	5	5	150	0,0	0,00	0,40	28	25
AB	Chateh	CBXAT-7	5	5	90	-3,0	5,89	0,41	27	48
AB	Coronation	CBXT-14	10	10	20000	8,9	3,31	0,91	513	6923
AB	Drumheller	CFCN-TV-1	12	12	8200	8,9	3,01	1,59	238	2567
AB	Etzikom	CBCA-TV-1	12	12	46000	8,9	3,98	1,32	101	1449
AB	Falher	CBXFT-2	6	6	49000	2,0	2,23	0,81	205	451
AB	Fort Mcmurray	CBXT-6	9	9	350000	11,8	4,57	4,45	58	906
AB	Fort Mcmurray	CBXFT-6	12	12	400000	11,8	4,57	4,41	59	924
AB	Fort Vermilion	CBXAT-5	11	11	158000	11,8	5,75	3,92	37	856
AB	Grande Prairie	CBXAT	10	10	11000	11,8	2,95	1,50	111	2343
AB	Grande Prairie	CFRN-TV-1	13	13	9700	11,8	3,01	1,80	103	2061
AB	High Level	CBXAT-4	8	8	5300	0,0	4,50	0,49	16	41
AB	Hinton	CBXT-3	8	8	900	1,7	3,01	0,44	22	58
AB	Jean D'Or	CBXAT-9	13	13	140	-3,0	4,56	0,49	4	5
AB	Lac La Biche	CBXT-5	10	10	1200	1,7	3,01	0,48	32	86
AB	Lethbridge	CISA-TV	7	7	22000	11,8	2,89	1,79	550	10710
AB	Lethbridge	CBRT-6	10	10	22000	11,8	2,56	1,69	394	7294
AB	Lethbridge	CFCN-TV-5	13	13	32000	8,9	3,87	1,58	352	4637
AB	Lloydminster	CITL-TV	4	4	5000	9,9	0,00	1,02	648	5000
AB	Lougheed	CFRN-TV-7	7	7	4300	11,8	6,23	9,31	93	692
AB	Manning	CBXAT-3	12	12	410	6,1	3,01	7,46	90	132
AB	Medicine Hat	CFCN-TV-8	8	8	53000	11,8	6,28	8,92	110	905

PR	CITY	CALL SIGN	DTV CH	NTSC CH	ERP IC Plan (Watt)	NTSC AVG Antenna Gain (dB)	NTSC Peak to AVG (dB)	NTSC System losses (dB)	ATSC TX Power Considered (Watt)	ERP Considered (Watt)
AB	Peace River	CBXAT-1	7	7	74000	8,9	3,01	6,39	103	366
AB	Peace River	CBXFT-5	9	9	25000	8,9	1,97	6,18	27	79
AB	Red Deer	CFRN-TV-6	8	8	12000	11,8	5,09	1,83	73	2333
AB	Red Deer	CITV-TV-1	10	10	14000	13,5	2,57	1,66	387	10682
AB	Rocky Mountain House	CFRN-TV-10	12	12	260	0,0	5,81	0,49	16	54
AB	Rosemary	CBRT-5	11	11	26000	11,8	2,58	1,73	409	7533
AB	Slave Lake	CBXAT-11	11	11	6400	1,7	8,41	0,49	16	148
AB	Whitecourt	CFRN-TV-3	12	12	4400	11,8	2,62	0,83	25	560
BC	100 Mile House	CFJC-TV-6	5	5	400	2,0	0,00	0,37	35	51
BC	Alert Bay	CBUT-16	11	11	440	-3,0	3,51	0,50	29	29
BC	Bonnington Falls	CBUDT	13	13	440	-3,0	8,59	0,43	4	12
BC	Burns Lake	CH4333	7	7	2600	-3,0	4,69	0,39	18	24
BC	Burns Lake	CKHS-TV	13	13	95	-3,0	5,95	0,39	1	2
BC	Campbell River	CHEK-TV-5	13	13	2700	8,9	4,77	10,61	45	91
BC	Canal Flats	CBUBT-1	12	12	410000	1,7	12,73	0,44	28	709
BC	Chetwynd	CBCD-TV-2	7	7	8	-3,0	5,36	0,43	1	2
BC	Clinton	CFJC-TV-4	9	9	1000	-3,0	0,00	0,39	14	7
BC	Courtenay	CKVU-TV-1	5	5	49000	5,0	2,57	0,56	297	1487
BC	Courtenay	CBUT-1	9	9	39000	1,7	3,01	0,49	16	42
BC	Courtenay	CHAN-TV-4	11	11	4200	6,1	2,93	10,11	101	79
BC	Cranbrook	CFCN-TV-9	5	5	110	-3,0	5,85	0,38	12	22
BC	Cranbrook	CBUBT-7	10	10	340	1,7	3,88	0,41	22	73
BC	Crawford Bay	CBUCT-1	5	5	85000	0,0	3,01	0,40	59	107
BC	Dawson Creek	CJDC-TV	5	5	2200	8,1	2,79	1,01	52	507
BC	Fernie	CBUBT-9	8	8	14000	-3,0	12,37	0,43	9	74
BC	Fort Fraser	CBCB-TV-2	13	13	4000	0,0	4,42	0,48	10	26
BC	Fort Nelson	CBUGT	8	8	370	8,9	0,00	5,65	19	39
BC	Fort St John	CBCD-TV-3	9	9	15500	-3,0	5,64	0,48	13	22
BC	Fraser Lake	CFFL-TV-1	9	9	50	-3,0	4,46	0,42	8	10
BC	Golden	CBUBT-2	13	13	14000	-3,0	11,55	0,46	2	11
BC	Hazelton	CHHZ-TV	9	9	440	-3,0	4,99	0,40	8	11
BC	Houston	CFHO-TV	8	8	640	-3,0	4,70	0,47	9	12
BC	Mcbride	CBUHT-3	6	6	85000	2,0	6,02	0,40	59	344
BC	Nelson	CBUCT	9	9	40	1,7	3,63	0,49	13	40
BC	Oliver	CBUT-42	6	6	4500	-3,0	3,45	0,38	26	26
BC	Oliver	CHBC-TV-3	8	8	14000	-3,0	3,01	0,41	18	16

PR	CITY	CALL SIGN	DTV CH	NTSC CH	ERP IC Plan (Watt)	NTSC AVG Antenna Gain (dB)	NTSC Peak to AVG (dB)	NTSC System losses (dB)	ATSC TX Power Considered (Watt)	ERP Considered (Watt)
BC	Ootsa Lake	CH4467	5	5	3000	-3,0	3,58	0,37	12	12
BC	Ootsa Lake	CHHH-TV	10	10	11300	-3,0	3,56	0,43	10	11
BC	Ootsa Lake	CHBL-TV	11	11	13000	-3,0	1,27	0,40	9	5
BC	Penticton	CHKL-TV-1	10	10	6100	0,0	3,90	0,41	15	34
BC	Penticton	CHBC-TV-1	13	13	50	0,0	2,55	0,42	10	17
BC	Port Hardy	CBUT-19	6	6	300	-3,0	2,48	0,40	39	32
BC	Prince George	CIFG-TV	12	12	2300	6,1	3,93	12,60	254	141
BC	Purden Lake	CBUHT-1	10	10	210	-3,0	6,13	0,48	3	5
BC	Salmon Arm	CHBC-TV-4	9	9	440	-3,0	3,88	0,43	33	36
BC	Smithers	CBCY-TV-2	5	5	42	-3,0	6,03	0,38	18	34
BC	Smithers	CFHO-TV-1	13	13	70	-3,0	3,33	0,44	7	7
BC	Sparwood	CBUBT-10	11	11	13600	-3,0	10,86	0,41	16	89
BC	Terrace	CBUFT-3	11	11	2600	1,7	2,63	0,43	15	36
BC	Trail	CKTN-TV	8	8	2200	8,9	6,32	15,73	611	542
BC	Trail	CBUAT	11	11	14400	8,9	2,43	13,36	154	96
BC	Valemount	CBUHT-5	12	12	14000	0,0	5,46	0,42	37	117
BC	Vernon	CHBC-TV-2	7	7	220	0,0	3,01	0,42	11	21
BC	Vernon	CHKL-TV-2	12	12	240	-3,0	3,88	0,41	17	19
BC	Whistler	CBUWT	13	13	440	-3,0	4,02	0,48	18	20
BC	Woss Camp	CBUT-13	12	12	150	0,0	5,00	0,43	16	45
MB	Dauphin	CKYD-TV	12	12	6312	8,9	4,06	1,62	323	4405
MB	Fairford	CBWGT-2	7	7	928	6,1	3,01	3,60	57	201
MB	Fisher Branch	CKYA-TV	8	8	57200	8,9	3,01	1,42	204	2287
MB	Fisher Branch	CBWGT	10	10	32500	11,8	2,66	1,60	87	1680
MB	Flin Flon	CBWBT	10	10	21800	11,8	3,91	1,11	26	751
MB	Flin Flon	CKYF-TV	13	13	104	8,9	2,97	4,08	17	104
MB	Foxwarren	CKX-TV-1	11	11	21000	8,9	2,94	1,81	364	3667
MB	Gods Lake Narrow	CBWXT	13	13	7822	6,1	6,80	2,56	39	426
MB	Grand Rapids	CBWHT	8	8	64	-3,0	6,35	0,49	25	48
MB	Jackhead	CBWGT-1	5	5	7600	8,1	2,75	1,26	41	370
MB	Leaf Rapids	CBWQT	13	13	534	0,0	8,45	0,55	11	70
MB	Little Grand Rapids	CBWZT	9	9	964	-3,0	11,75	0,57	26	174
MB	Mccusker Lake	CBWUT	10	10	867	-3,0	8,29	0,52	27	81
MB	Melita	CKX-TV-2	9	9	89	-3,0	0,00	0,49	24	11
MB	Pine Falls	CBWFT-6	11	11	631	11,8	6,78	3,59	9	280
MB	Portage La Prairie	CHMI-TV	13	13	8300	11,8	2,21	2,69	613	8300

PR	CITY	CALL SIGN	DTV CH	NTSC CH	ERP IC Plan (Watt)	NTSC AVG Antenna Gain (dB)	NTSC Peak to AVG (dB)	NTSC System losses (dB)	ATSC TX Power Considered (Watt)	ERP Considered (Watt)
MB	The Pas	CBWFT-1	6	6	41	-3,0	4,69	0,41	14	19
MB	The Pas	CBWIT	7	7	44	1,7	2,29	0,52	20	44
MB	The Pas	CKYP-TV	12	12	141	6,1	2,99	3,39	34	127
MB	Thompson	CBWTT	7	7	76	0,0	4,51	0,49	18	46
MB	Thompson	CKYT-TV	9	9	218	6,1	2,98	2,79	38	162
MB	Waasagomach	CBWWT	9	9	4500	6,1	7,14	3,06	62	648
NB	Bon Accord	CBAT-TV-1	6	6	1700	8,1	2,62	0,85	175	1700
NB	Campbellton	CBAFT-7	9	9	16700	8,9	5,41	0,82	149	3329
NB	Chatham	CBAT-TV-3	6	6	1860	5,0	2,22	0,62	190	869
NB	Edmundston	CIMT-TV-1	4	4	31000	2,0	3,92	0,55	72	250
NB	Edmundston	CBAFT-2	13	13	3200	11,8	2,81	1,48	60	1224
NB	Moncton	CBAT-TV-2	7	7	6920	13,5	3,69	1,40	182	6920
NB	Moncton	CBAFT	11	11	16190	13,5	3,73	1,30	272	10639
NB	Saint John	CKLT-TV	9	9	3800	11,8	3,02	0,96	156	3800
NB	Saint John	CIHF-TV-2	12	12	5780	6,1	2,88	0,60	162	1117
NB	Upsalquitch	CKAM-TV	12	12	3430	11,8	2,48	2,01	204	3430
NF	Bonavista	CJWB-TV	10	10	7430	6,1	2,50	0,79	97	589
NF	Carmanville	CBNAT-7	7	7	1300	6,1	8,92	1,66	34	733
NF	Clarenville	CBNT-10	7	7	580	0,0	3,01	0,42	15	27
NF	Clarenville	CJCV-TV	11	11	30	-3,0	4,79	0,54	6	8
NF	Conche	CBNAT-8	12	12	400	0,0	6,08	0,42	12	45
NF	Corner Brook	CBYT	5	5	11790	5,0	1,71	0,63	249	1008
NF	Corner Brook	CJWN-TV	10	10	38205	11,8	3,86	1,06	26	755
NF	Cow Head	CBYT-6	8	8	2400	6,1	4,37	1,24	81	676
NF	Deer Lake	CJLW-TV	8	8	14200	0,0	7,17	0,47	19	88
NF	Deer Lake	CBYAT	12	12	1100	8,9	2,52	2,71	13	95
NF	Fox Harbour	CBNAT-10	7	7	29500	6,1	5,38	0,85	100	1150
NF	Goose Bay	CFLA-TV	8	8	21000	6,1	6,98	3,31	33	317
NF	Goose Bay	CHTG-TV	12	12	21000	1,7	6,98	0,46	24	158
NF	Grand Falls	CBNAT	11	11	14710	13,5	0,00	1,63	679	10447
NF	Hampden	CBNAT-23	13	13	440	-3,0	6,36	0,42	25	49
NF	Labrador City	CBFT-12	11	11	440	-3,0	7,97	0,43	35	99
NF	Labrador City	CBNLT	13	13	440	-3,0	7,97	0,43	35	99
NF	Marystown	CBNT-3	5	5	4150	9,9	2,77	0,68	262	4150
NF	Marystown	CJMA-TV	11	11	130	1,7	3,01	0,49	23	60
NF	Millertown	CBNAT-5	9	9	50	-3,0	9,20	0,49	10	36

PR	CITY	CALL SIGN	DTV CH	NTSC CH	ERP IC Plan (Watt)	NTSC AVG Antenna Gain (dB)	NTSC Peak to AVG (dB)	NTSC System losses (dB)	ATSC TX Power Considered (Watt)	ERP Considered (Watt)
NF	Mt St Margaret	CBNAT-9	9	9	11760	8,9	2,03	1,12	159	1519
NF	Musgrave Harbour	CBNAT-11	9	9	4500	1,7	6,87	0,41	50	327
NF	Placentia	CBNT-2	12	12	32300	8,9	2,35	1,01	57	606
NF	Port Au Port	CBFNT	13	13	5980	6,1	6,12	0,69	136	1926
NF	Port Rexton	CBNT-1	13	13	20300	8,9	3,01	1,52	96	1051
NF	Portland Creek	CBYT-8	13	13	93800	6,1	7,25	2,18	31	401
NF	Ramea	CBNT-25	13	13	2000	6,1	7,64	1,11	23	416
NF	Red Rocks	CJRR-TV	11	11	427	0,0	3,04	0,51	17	31
NF	Roddickton	CBNAT-22	11	11	13600	1,7	4,01	0,48	47	158
NF	Rose Blanche	CBYT-11	9	9	440	-3,0	4,40	0,40	17	21
NF	Springdale	CBNAT-13	13	13	440	0,0	2,53	0,42	24	39
NF	St Alban's	CBNT-4	9	9	3400	0,0	7,10	0,44	31	142
NF	St Andrew's	CBYT-5	6	6	3190	2,0	2,88	0,41	41	115
NF	St Anthony	CBNAT-4	6	6	7820	8,1	2,90	0,69	68	734
NF	St John's	CBNT	8	8	13730	11,8	2,59	1,17	556	11692
NF	St Mary's	CBNT-6	10	10	570	1,7	6,08	0,53	20	105
NF	St Vincent's	CBNT-26	7	7	1100	6,1	4,51	1,97	70	508
NF	Stephenville	CBYT-1	8	8	5710	6,1	6,04	0,76	110	1513
NF	Sunnyside	CBNT-41	9	9	22	0,0	5,85	0,43	6	22
NF	Wesleyville	CBNT-9	5	5	1250	-3,0	5,68	0,40	42	71
NS	Antigonish	CJCB-TV-2	9	9	12460	11,8	2,69	1,42	424	8583
NS	Aspen	CBHT-14	5	5	96	-3,0	6,68	0,45	12	26
NS	Bridgewater	CIHF-TV-6	9	9	7885	11,8	3,19	1,14	19	465
NS	Caledonia	CJCH-TV-6	6	6	6700	8,1	2,88	0,85	555	5720
NS	Canning	CJCH-TV-1	10	10	2800	8,9	3,01	1,12	50	596
NS	Cheticamp	CBHFT-4	10	10	3570	11,8	3,25	1,16	22	547
NS	Dingwall	CBIT-16	12	12	440	-3,0	4,55	0,41	8	10
NS	Inverness	CJCB-TV-1	6	6	2240	2,0	0,00	0,51	354	498
NS	Inverness	CBIT-19	8	8	4635	1,7	3,41	0,48	18	53
NS	Isle Madame	CIMC-TV	10	10	98	0,0	4,26	0,44	29	69
NS	Liverpool	CBHT-1	12	12	5310	8,9	2,39	2,60	9	64
NS	Middleton	CBHT-6	8	8	5030	8,9	3,92	1,10	94	1401
NS	Mulgrave	CBHFT-2	7	7	21677	11,8	3,86	1,40	318	8493
NS	Mulgrave	CBHT-11	12	12	26260	11,8	3,01	1,28	380	8562
NS	Sheet Harbour	CBHT-4	11	11	20240	8,9	2,93	0,96	57	693
NS	Shelburne	CBHT-2	7	7	66800	8,9	6,53	1,06	52	1422

PR	CITY	CALL SIGN	DTV CH	NTSC CH	ERP IC Plan (Watt)	NTSC AVG Antenna Gain (dB)	NTSC Peak to AVG (dB)	NTSC System losses (dB)	ATSC TX Power Considered (Watt)	ERP Considered (Watt)
NS	Sydney	CIHF-TV-7	11	11	24420	8,9	4,65	1,13	292	5105
NS	Sydney	CBHFT-3	13	13	39620	8,9	2,96	2,36	33	298
NS	Yarmouth	CBHT-3	11	11	5700	8,9	3,88	1,58	96	1271
NT	Fort Providence	CBEBT-3	13	13	380	0,0	7,16	0,42	33	154
NT	Hay River	CBEBT-1	7	7	140	1,7	6,77	0,47	22	140
NT	Inuvik	CHAK-TV	6	6	140	-3,0	2,87	0,45	47	41
NT	Rae-Edzo	CFYK-TV-1	10	10	310	-3,0	6,74	0,43	53	113
NT	Yellowknife	CFYK-TV	8	8	2400	6,1	2,43	2,66	41	157
NT	Yellowknife	CHTY-TV	11	11	130	0,0	2,81	0,46	42	72
NT	Yellowknife	CH4127	13	13	130	0,0	2,81	0,46	42	72
NU	Cape Dorset	CBEJT	9	9	370	-3,0	4,98	0,40	35	51
ON	Atikokan	CBWCT-1	7	7	560	8,9	3,01	5,37	48	215
ON	Chapleau	CBCU-TV	7	7	500	1,7	6,20	0,51	28	151
ON	Chapleau	CBLFT-22	13	13	9000	0,0	7,02	0,45	37	168
ON	Dryden	CBWFT-9	6	6	12600	8,1	2,39	0,82	136	1265
ON	Dryden	CBWDT	9	9	32000	11,8	2,55	1,53	28	533
ON	Elliot Lake	CBEC-TV	7	7	32000	11,8	3,00	0,85	91	2251
ON	Elliot Lake	CBLFT-6	12	12	37000	6,1	2,99	0,76	181	1233
ON	Fort Albany	CBLDT	8	8	250	0,0	6,99	0,44	41	184
ON	Fort Frances	CBWCT	5	5	6200	8,1	2,78	0,90	523	5203
ON	Geraldton	CBLFT-26	7	7	21500	11,8	1,70	5,49	18	112
ON	Geraldton	CBLGT	13	13	28000	11,8	2,91	1,59	69	1422
ON	Gogama	CBLFT-21	12	12	185	0,0	7,03	0,58	18	78
ON	Hearst	CBCC-TV	5	5	12500	8,1	1,83	0,97	66	523
ON	Hearst	CBLFT-5	7	7	26500	11,8	3,01	1,54	26	559
ON	Huntsville	CKNY-TV-11	11	11	24000	11,8	2,59	1,66	571	10715
ON	Huntsville	CICA-TV-13	13	13	28200	8,9	3,00	1,65	100	1060
ON	Kapuskasing	CITO-TV-1	10	10	132000	11,8	6,99	3,58	21	695
ON	Kapuskasing	CBLFT-4	12	12	62000	8,9	2,37	1,35	114	1123
ON	Kearns	CITO-TV-2	11	11	21000	11,8	3,01	1,28	474	10666
ON	Kenora	CBWAT	8	8	64000	11,8	3,01	1,23	26	601
ON	Kenora	CJBN-TV	13	13	50	-3,0	0,00	0,48	21	9
ON	Kingston	CKWS-TV	11	11	9400	11,8	3,02	2,48	548	9400
ON	Manitouwage	CBLAT-1	8	8	28000	11,8	2,60	1,58	69	1324
ON	Marathon	CBLAT-4	11	11	12000	11,8	3,88	1,11	22	617
ON	Midland	CIII-TV-7	7	7	6900	11,8	2,70	2,87	474	6900

PR	CITY	CALL SIGN	DTV CH	NTSC CH	ERP IC Plan (Watt)	NTSC AVG Antenna Gain (dB)	NTSC Peak to AVG (dB)	NTSC System losses (dB)	ATSC TX Power Considered (Watt)	ERP Considered (Watt)
ON	North Bay	CICA-TV-6	6	6	6000	8,1	2,22	0,84	582	5162
ON	North Bay	CKNY-TV	10	10	27000	8,9	2,74	1,29	403	4374
ON	Owen Sound	CICA-TV-12	12	12	61000	8,9	3,81	1,36	341	4655
ON	Paris	CIII-TV	6	6	4000	8,1	0,00	1,34	844	4000
ON	Peterborough	CHEX-TV	12	12	20000	11,8	3,30	2,62	337	5974
ON	Red Lake	CBWET	10	10	330000	1,7	2,99	0,49	24	62
ON	Sioux Lookout	CBWDT-1	12	12	22000	11,8	3,80	1,58	94	2384
ON	Sturgeon Falls	CBLFT-1	7	7	5900	11,8	2,54	1,53	30	579
ON	Sudbury	CBLT-6	9	9	19000	11,8	2,34	1,79	381	6550
ON	Sudbury	CFGC-TV	11	11	13000	8,9	0,00	1,14	155	922
ON	Sudbury	CBLFT-2	13	13	9800	8,9	2,98	1,01	51	625
ON	Thunder Bay	CICO-TV-9	9	9	16500	11,8	0,00	1,55	99	1053
ON	Thunder Bay	CBLFT-18	12	12	16500	11,8	0,00	1,55	70	746
ON	Timmins	CBLT-7	6	6	8500	8,1	0,00	0,94	1109	5773
ON	Timmins	CICA-TV-7	7	7	23000	8,9	2,26	1,40	491	4645
ON	Timmins	CBLFT-3	9	9	19000	8,9	2,73	1,56	97	985
ON	Timmins	CHCH-TV-7	11	11	370	8,9	3,42	4,48	20	120
ON	Timmins	CIII-TV-13	13	13	30000	8,9	3,33	1,29	67	832
ON	Wawa	CHBX-TV-1	7	7	36000	11,8	3,04	1,15	95	2225
ON	Wawa	CBLAT-3	9	9	26000	8,9	3,01	1,28	92	1059
ON	White River	CBLAT-2	12	12	17000	0,0	3,89	0,56	15	31
PE	Charlottetown	CKCW-TV-1	8	8	9830	6,1	3,01	1,02	162	1044
PE	Charlottetown	CBCT	13	13	12060	13,5	2,59	1,89	321	8457
PE	Elmira	CBCT-2	11	11	35	0,0	5,98	0,46	10	35
PE	St Edward	CKCW-TV-2	5	5	260	0,0	3,69	0,42	35	75
PE	St Edward	CBAFT-6	9	9	49	-3,0	3,80	0,45	11	12
QC	Aguanish	CBST-7	8	8	320	0,0	6,87	0,42	27	118
QC	Baie-Comeau	CFTF-TV-5	9	9	1100	1,7	8,46	0,44	36	338
QC	Baie-Trinité	CIVF-TV	12	12	46000	8,9	4,20	1,03	350	5637
QC	Beauceville	CBVT-6	6	6	11100	8,1	4,16	0,95	44	591
QC	Blanc-Sablon	CBMST	5	5	210	-3,0	7,92	0,43	22	63
QC	Carleton	CHAU-TV	5	5	600	8,1	2,48	0,71	62	600
QC	Chandler	CHAU-TV-4	6	6	150	-3,0	3,25	0,40	7	6
QC	Chandler	CBGAT-15	8	8	400	-3,0	4,03	0,46	30	35
QC	Chapeau	CBOFT-1	11	11	600	1,7	9,36	0,59	17	185
QC	Chibougamau	CBFAT	5	5	170	2,0	0,00	0,42	27	38

PR	CITY	CALL SIGN	DTV CH	NTSC CH	ERP IC Plan (Watt)	NTSC AVG Antenna Gain (dB)	NTSC Peak to AVG (dB)	NTSC System losses (dB)	ATSC TX Power Considered (Watt)	ERP Considered (Watt)
QC	Chicoutimi	CJPM-TV	6	6	16000	8,1	2,15	0,58	706	6540
QC	Chicoutimi	CIVV-TV	8	8	90000	11,8	2,93	1,58	496	10247
QC	Cloridorme	CBGAT-16	8	8	350	-3,0	4,49	0,44	14	18
QC	Fermont	CBFT-13	7	7	63	-3,0	6,99	0,45	2	5
QC	Fermont	CBMRT	9	9	52	-3,0	6,94	0,46	2	5
QC	Forestville	CFTF-TV-4	4	4	20000	2,0	8,34	0,63	54	504
QC	Gaspé	CHAU-TV-6	7	7	1600	0,0	0,00	0,43	23	21
QC	Gaspé	CBGAT-17	9	9	3700	8,9	4,93	4,64	21	172
QC	Grande-Vallée	CBGAT-3	6	6	42	2,0	5,88	0,44	8	42
QC	Harrington-Harbour	CBST-11	8	8	46	-3,0	2,77	0,44	15	13
QC	Harrington-Harbour	CBMUT	13	13	46	-3,0	2,77	0,44	15	13
QC	Havre-St-Pierre	CBST-1	12	12	440	-3,0	0,00	0,41	3	1
QC	Iles-de-la-Madeleine	CBMYT	7	7	22500	6,1	3,34	2,29	44	228
QC	Iles-de-la-Madeleine	CBIMT	12	12	22500	8,9	3,33	2,29	28	278
QC	Jonquière	CKTV-TV	12	12	1100	11,8	3,74	1,57	44	1100
QC	Joutel	CJDG-TV-3	11	11	310	-3,0	7,22	0,54	11	27
QC	La Tabatière	CBMLT	10	10	12	-3,0	5,09	0,45	5	7
QC	La Tuque	CBMET	9	9	32	-3,0	4,83	0,43	9	12
QC	Lac-Mégantic	CBVT-3	12	12	210	-3,0	7,16	0,46	18	43
QC	L'Anse-à-Valleau	CHAU-TV-9	12	12	75	-3,0	3,94	0,43	3	3
QC	Longue-Pointe-de-Mingan	CBST-18	6	6	150	-3,0	9,09	0,40	25	91
QC	Malartic	CBVD-TV	5	5	7200	8,1	3,12	0,92	103	1104
QC	Matagami	CJDG-TV-4	9	9	60	-3,0	7,55	0,48	8	19
QC	Matane	CBGAT	6	6	5300	2,0	2,96	0,77	150	392
QC	Mont-Climont	CBGAT-1	13	13	19000	1,7	3,94	0,42	17	58
QC	Mont-Tremblant	CBFT-1	11	11	1900	6,1	5,44	8,86	94	175
QC	Murdochville	CBGAT-2	10	10	4700	8,9	4,48	9,21	51	134
QC	Percé	CBGAT-20	11	11	4500	6,1	4,41	0,85	188	1741
QC	Percé	CHAU-TV-5	13	13	4500	8,9	4,40	0,85	104	1836
QC	Port-Daniel	CBGAT-21	7	7	100	-3,0	6,02	0,46	15	27
QC	Radisson	CBFRT	8	8	460	-3,0	5,05	0,49	15	21
QC	Radisson	CFBJ-TV	10	10	68	-3,0	9,52	0,42	3	11
QC	Radisson	CJBJ-TV	13	13	36	-3,0	9,70	0,46	2	7
QC	Rimouski	CFER-TV	11	11	3300	11,8	2,71	0,84	142	3300
QC	Rivière-au-Renard	CHAU-TV-7	4	4	4700	2,0	6,51	0,60	48	294

PR	CITY	CALL SIGN	DTV CH	NTSC CH	ERP IC Plan (Watt)	NTSC AVG Antenna Gain (dB)	NTSC Peak to AVG (dB)	NTSC System losses (dB)	ATSC TX Power Considered (Watt)	ERP Considered (Watt)
QC	Rivière-au-Tonnerre	CBST-6	7	7	5700	6,1	3,57	1,27	38	262
QC	Rivière-du-Loup	CKRT-TV	7	7	6500	8,9	0,00	0,87	244	1550
QC	Rivière-du-Loup	CIMT-TV	9	9	6000	11,8	2,04	0,93	307	6000
QC	Rivière-St-Paul	CBMPT	11	11	75	-3,0	7,17	0,48	3	7
QC	Roberval	CJPM-TV-1	10	10	36000	8,9	2,57	1,33	77	791
QC	Rouyn-Noranda	CIVA-TV-1	8	8	17000	11,8	3,20	1,76	401	8439
QC	Rouyn-Noranda	CFEM-TV	13	13	20000	11,8	3,19	1,76	543	11414
QC	Schefferville	CBSET-1	7	7	20	-3,0	6,99	0,42	7	17
QC	Schefferville	CBFT-8	9	9	21	-3,0	6,99	0,40	7	17
QC	Sept-Îles	CFER-TV-2	5	5	3000	8,1	6,38	0,86	130	3000
QC	Sept-Îles	CFTF-TV-7	7	7	18000	1,7	8,14	0,52	22	185
QC	Sept-Îles	CIVG-TV	9	9	19000	8,9	4,07	1,03	520	8133
QC	Sept-Îles	CBST	13	13	12500	11,8	3,77	1,39	25	659
QC	Sherbrooke	CHLT-TV	7	7	4000	11,8	2,47	0,69	175	4000
QC	Sherbrooke	CKSH-TV	9	9	4000	11,8	4,59	0,74	109	4000
QC	Sherbrooke	CKMI-TV-2	11	11	1000	8,9	2,75	0,85	65	776
QC	Ste-Anne-des-Monts	CBGAT-11	8	8	34100	8,9	5,75	1,54	269	5510
QC	Ste-Marguerite-Marie	CHAU-TV-1	3	3	5800	2,0	5,05	0,62	137	603
QC	St-Fabien-de-Panet	CBVT-5	13	13	340	0,0	4,79	0,54	15	41
QC	Temiscaming	CBFST-2	12	12	14000	11,8	3,02	1,55	22	467
QC	Trois-Rivières	CHEM-TV	8	8	11500	11,8	2,83	1,83	563	10716
QC	Trois-Rivières	CKTM-TV	13	13	5200	11,8	2,96	2,48	308	5200
QC	Val-d'Or	CJDG-TV	7	7	21500	8,9	1,90	1,55	364	3064
QC	Val-d'Or	CFEM-TV-1	10	10	22000	8,9	2,00	1,55	361	3108
QC	Val-d'Or	CIVA-TV	12	12	22000	11,8	2,10	1,55	325	5569
QC	Waskaganish	CBFHT	9	9	370	-3,0	0,00	0,43	1	1
SK	Alticane	CIPA-TV-1	10	10	26300	11,8	2,95	1,23	69	1554
SK	Beauval	CBKBT	7	7	22100	8,9	6,17	5,70	35	304
SK	Big River	CIPA-TV-2	7	7	80	-3,0	6,04	0,45	6	11
SK	Buffalo Narrows	CBKDT	11	11	400	1,7	1,25	0,62	23	40
SK	Carlyle Lake	CIEW-TV	7	7	7530	8,9	3,85	2,28	489	5455
SK	Colgate	CKCK-TV-1	12	12	36600	8,9	2,62	1,59	290	2849
SK	Fond Du Lac	CBKAT-2	10	10	3200	1,7	7,78	0,48	36	290
SK	Fort Qu'Appelle	CKCK-TV-7	7	7	438	-3,0	0,00	0,42	40	18
SK	Golden Prairie	CKMC-TV-1	10	10	33300	11,8	3,35	1,65	343	7666

PR	CITY	CALL SIGN	DTV CH	NTSC CH	ERP IC Plan (Watt)	NTSC AVG Antenna Gain (dB)	NTSC Peak to AVG (dB)	NTSC System losses (dB)	ATSC TX Power Considered (Watt)	ERP Considered (Watt)
SK	Greenwater Lake	CBKST-11	4	4	4900	8,1	2,71	0,89	93	917
SK	Hudson Bay	CBKT-10	9	9	141	0,0	2,22	0,48	28	42
SK	Hudson Bay	CICC-TV-3	11	11	124	0,0	2,20	0,49	27	40
SK	Ile-A-La-Crosse	CBKCT	9	9	400	-3,0	8,79	0,60	9	30
SK	Island Falls	CBWBT-2	7	7	700	0,0	8,26	0,57	15	87
SK	La Loche	CBKDT-2	13	13	7800	0,0	10,70	0,44	37	393
SK	La Ronge	CBKST-2	12	12	5600	-3,0	5,96	0,45	31	55
SK	Leoville	CBKST-3	12	12	46700	8,9	3,02	1,38	252	2855
SK	Meadow Lake	CBCS-TV-1	8	8	17600	11,8	3,03	1,54	34	724
SK	Montreal Lake	CBKST-5	11	11	300	0,0	5,53	0,46	28	89
SK	Moose Jaw	CBKT-1	4	4	4000	8,1	3,19	0,88	364	4000
SK	Moose Jaw	CKMJ-TV	7	7	16700	8,9	2,48	2,03	374	3219
SK	Nipawin	CBKST-15	10	10	49900	11,8	2,66	5,43	37	294
SK	Nipawin	CKBQ-TV-1	12	12	1100	8,9	3,32	5,43	89	426
SK	Norquay	CICC-TV-2	7	7	8300	11,8	2,16	1,11	140	2704
SK	Norquay	CBKT-9	13	13	96700	6,1	2,22	1,15	187	974
SK	North Battleford	CFQC-TV-2	6	6	8000	5,0	2,56	0,75	364	1746
SK	North Battleford	CBKST-10	7	7	8500	8,9	1,02	1,10	243	1853
SK	Palmbere Lake	CBKDT-1	8	8	60	0,0	5,17	0,49	20	60
SK	Pelican Narrows	CBWBT-3	5	5	9600	0,0	6,77	0,46	26	113
SK	Prince Albert	CBKST-9	5	5	4200	8,1	0,00	0,90	801	4200
SK	Prince Albert	CIPA-TV	9	9	19200	11,8	3,51	1,42	437	10698
SK	Regina	CBKT	9	9	20800	11,8	2,52	1,92	474	8233
SK	Regina	CFRE-TV	11	11	10600	11,8	3,48	2,46	549	10496
SK	Regina	CBKFT	13	13	28500	11,8	3,58	1,73	338	7833
SK	Riverhurst	CBKT-5	10	10	128	0,0	2,60	0,59	15	24
SK	Saskatoon	CFQC-TV	8	8	13400	13,5	2,57	1,76	397	10701
SK	Saskatoon	CBKST	11	11	16000	13,5	0,00	1,61	695	10755
SK	Saskatoon	CBKFT-1	13	13	20000	8,9	4,83	1,42	576	9807
SK	Shaunavon	CBCP-TV-1	7	7	22000	13,5	3,01	11,58	95	296
SK	Southend	CBKST-8	13	13	160	-3,0	14,44	0,46	5	60
SK	St Brieux	CBKFT-4	7	7	128	-3,0	0,00	0,47	20	9
SK	Stanley Mission	CBKST-4	8	8	440	0,0	5,26	0,41	37	112
SK	Stony Rapids	CBKAT-3	7	7	300	1,7	5,54	0,59	18	84
SK	Stranraer	CBKST-1	9	9	5600	11,8	2,97	2,63	342	5600
SK	Swift Current	CBKT-4	5	5	2600	5,0	0,00	0,73	292	781

PR	CITY	CALL SIGN	DTV CH	NTSC CH	ERP IC Plan (Watt)	NTSC AVG Antenna Gain (dB)	NTSC Peak to AVG (dB)	NTSC System losses (dB)	ATSC TX Power Considered (Watt)	ERP Considered (Watt)
SK	Swift Current	CKMC-TV	12	12	12600	8,9	2,94	1,23	289	3330
SK	Uranium City	CBKAT	8	8	30	-3,0	5,95	0,46	1	2
SK	Willow Bunch	CKCK-TV-2	6	6	3272	8,1	2,89	1,01	276	2749
SK	Willow Bunch	CBKT-2	10	10	14200	11,8	4,74	1,64	70	2174
SK	Wynyard	CBKT-8	6	6	1700	8,1	0,00	0,89	120	632
SK	Wynyard	CIWH-TV	12	12	32400	8,9	3,98	1,42	332	4652
SK	Yorkton	CBKT-6	5	5	9800	8,1	0,00	0,93	562	2931
SK	Yorkton	CICC-TV	10	10	12600	8,9	0,00	1,37	366	2077
YT	Dawson	CBDDT	7	7	440	-3,0	4,05	0,43	35	41
YT	Watson Lake	CBDAT	8	8	400	-3,0	7,35	0,43	6	14
YT	Whitehorse	CFWH-TV	6	6	1030	0,0	2,58	0,42	26	43
YT	Whitehorse	CBFT-15	7	7	3820	0,0	3,00	0,48	17	30
YT	Whitehorse	CHWT-TV	11	11	60	-3,0	0,00	0,40	14	7

Total = 362

DIFFERENT CHANNEL

PR	CITY	CALL SIGN	DTV CH	NTSC CH	ERP IC Plan (Watt)	New antenna model	New antenna gain(x)	line type	system losses(dB)	**TX power (Watt)**
SAME SITE AND TECHNICAL PARAMETERS AS FOR STUDY 1.										

Total = 118

List of DTV stations per category for study 3

DIFFERENT CHANNEL

PR	CITY	CALL SIGN	DTV CH	NTSC CH	ERP IC Plan (Watt)	NTSC AVG Antenna Gain (dB)	NTSC Peak to AVG (dB)	NTSC System losses (dB)	ATSC TX Power Considered (Watt)	ERP Considered (Watt)
AB	Burmis	CISA-TV-1	3	3	460	2,60	0,39	7,23	33	27
AB	Coutts/Milkriver	CBRT-16	4	4	1500	0,00	0,42	8,37	40	37
AB	High Prairie	CBXAT-2	2	2	1000000	2,57	0,71	6,72	66	658
AB	Hinton	CBXFT-7	3	3	1100	8,24	0,39	8,18	5	17
AB	Lac La Biche	CFRN-TV-5	2	2	3500	6,09	0,85	7,38	56	589
AB	Lethbridge	CKAL-TV-1	2	2	1000000	3,32	0,96	6,62	515	5715
AB	Lloydminster	CKSA-TV	2	2	19000	0,00	1,02	6,34	812	6269
AB	Medicine Hat	CHAT-TV	6	6	1000000	2,86	0,88	6,36	307	3137
AB	Peace River	CFRN-TV-2	3	3	1000000	2,53	0,92	6,68	27	249
AB	Pivot	CHAT-TV-1	4	4	5700	2,51	1,15	6,62	32	281
AB	Red Deer	CHCA-TV	6	6	1000000	2,52	0,91	6,30	569	5329
AB	Red Deer	CKEM-TV-1	4	4	1000000	3,04	1,04	6,32	37	376
BC	100 Mile House	CITM-TV	3	3	1200	2,57	0,40	6,20	26	68
BC	Burns Lake	CBCY-TV-1	4	4	610000	2,83	0,40	6,29	18	32
BC	Chilliwack	CBUT-2	3	3	20000	4,08	0,38	6,34	22	82
BC	Creston	CBUCT-2	3	3	970	7,45	0,40	6,01	16	40
BC	Houston	CBCY-TV	2	2	150000	3,40	0,42	6,30	18	35
BC	Kamloops	CHKM-TV	6	6	43000	0,00	0,58	6,72	170	236
BC	Kamloops	CFJC-TV	4	4	43000	0,00	0,58	6,72	157	217
BC	Kelowna	CHBC-TV	2	2	2000	0,00	0,55	6,30	142	199
BC	Kelowna	CHKL-TV	5	5	95000	2,43	0,58	6,21	151	367
BC	Nelson	CKTN-TV-3	3	3	440	3,88	0,40	9,60	34	38
BC	Oliver/Osoyoos	CKKM-TV	3	3	1000	0,00	0,39	5,90	31	45
BC	Pemberton	CBUPT	4	4	14000	6,77	0,39	9,60	10	23
BC	Prince George	CBUFT-4	4	4	750	3,01	0,39	8,55	7	6
BC	Prince George	CKPG-TV	2	2	560000	2,56	0,73	6,29	91	440
BC	Prince Rupert	CFTK-TV-1	6	6	1100	2,90	0,64	6,20	24	127
BC	Salmon Arm	CBUT-43	3	3	30000	2,37	0,43	5,80	6	5
BC	Terrace	CFTK-TV	3	3	150000	2,59	0,47	6,30	285	735

PR	CITY	CALL SIGN	DTV CH	NTSC CH	ERP IC Plan (Watt)	NTSC AVG Antenna Gain (dB)	NTSC Peak to AVG (dB)	NTSC System losses (dB)	ATSC TX Power Considered (Watt)	ERP Considered (Watt)
MB	Brandon	CKX-TV	5	5	218000	2,93	1,58	6,31	608	5368
MB	Brandon	CKYB-TV	4	4	216100	2,62	1,58	6,31	651	5348
MB	Flin Flon	CBWFT-2	3	3	69	4,69	0,41	8,44	13	18
MB	Lac Du Bonnet	CBWT-2	4	4	1000000	3,01	0,78	7,30	105	1133
MB	Mafeking	CBWYT	2	2	20000	5,74	0,95	7,32	52	1012
MB	Mccreary	CKX-TV-3	11	11	850000	2,87	0,68	5,25	203	2603
MB	Minnedosa	CKND-TV-2	2	2	241000	0,00	1,59	6,40	1220	5460
MB	Ste Rose Du Lac	CBWFT-4	3	3	201200	5,10	0,61	9,60	101	449
MB	Thompson	CBWFT-5	5	5	276	4,71	0,39	9,60	18	24
NB	Allardville	CBAFT-3	3	3	845000	2,49	0,86	6,69	581	5462
NB	Campbellton	CKCD-TV	7	7	846000	2,91	0,49	5,20	23	60
NB	Campbellton	CBAT-TV-4	4	4	205000	2,59	0,44	6,31	517	1343
NB	Florenceville	CKLT-TV-1	3	3	845000	2,65	0,50	6,61	387	2006
NB	Fredericton	CBAFT-1	5	5	845000	2,50	0,62	6,61	346	3445
NB	Fredericton	CIHF-TV-1	11	11	603000	3,47	1,04	5,25	49	665
NB	Moncton	CKCW-TV	2	2	742000	2,52	0,74	6,29	546	5314
NB	Saint John	CBAT-TV	4	4	274000	2,60	0,54	6,40	527	5469
NF	Argentia	CJOM-TV	3	3	850000	3,20	0,66	6,69	144	817
NF	Baie Verte	CBNAT-1	3	3	850000	1,42	0,72	6,21	342	637
NF	Bonne Bay	CBYT-3	2	2	850000	4,45	0,70	9,60	78	585
NF	Grand Bank	CJOX-TV-1	2	2	850000	2,97	0,80	7,30	119	620
NF	Grand Falls	CJCN-TV	4	4	850000	2,60	0,72	6,64	581	5781
NF	Hawke's Bay	CBYT-9	4	4	41000	6,40	0,50	8,55	70	432
NF	Hermitage	CBNT-24	4	4	845000	8,87	0,46	6,31	242	2662
NF	Port Aux Basques	CBYT-4	3	3	59900	2,52	0,41	8,69	47	76
NF	St John's	CBFJ-TV	4	4	5400	5,89	0,43	6,70	10	17
NF	St John's	CJON-TV	6	6	850000	4,47	0,69	6,22	722	11141
NF	Stephenville	CJSV-TV	4	4	850000	2,54	0,55	7,17	217	542
NF	Trepassey	CBNT-39	4	4	30800	5,40	0,38	8,43	23	37
NS	Caledonia	CBHT-9	2	2	803	4,31	0,39	8,59	45	56
NS	Cheticamp	CBIT-2	2	2	850000	4,74	0,63	6,63	104	426
NS	New Glasgow	CBHT-5	4	4	850000	2,53	0,42	7,14	33	53
NS	Port Hawkesbury	CJCB-TV-6	3	3	850000	4,28	0,74	8,17	172	1227
NS	Sheet Harbour	CJCH-TV-5	2	2	33700	4,95	0,40	8,47	44	126
NS	Shelburne	CIHF-TV-9	10	10	11300	3,36	1,79	5,92	26	152
NS	Sydney	CJCB-TV	4	4	850000	2,55	0,61	8,03	1424	14373
NS	Sydney	CBIT	5	5	850000	2,68	0,73	7,15	639	6466

PR	CITY	CALL SIGN	DTV CH	NTSC CH	ERP IC Plan (Watt)	NTSC AVG Antenna Gain (dB)	NTSC Peak to AVG (dB)	NTSC System losses (dB)	ATSC TX Power Considered (Watt)	ERP Considered (Watt)
NS	Yarmouth	CBHFT-1	3	3	850000	2,93	0,85	6,68	214	2225
ON	Bancroft	CIII-TV-2	2	2	4700	0,00	1,32	6,40	986	4700
ON	Barrie	CKVR-TV	3	3	7100	0,00	1,31	6,30	1116	5331
ON	Chatham	CBLFT-10	48	48	300	4,27	3,12	2,81	14	300
ON	Cornwall	CJOH-TV-8	8	8	1000000	3,01	1,79	5,23	430	8610
ON	Deseronto	CJOH-TV-6	6	6	850000	2,56	0,91	6,35	571	5384
ON	Elliot Lake	CICI-TV-1	3	3	1000000	0,00	0,62	7,26	463	1267
ON	Hearst	CITO-TV-3	4	4	1000000	3,31	1,06	6,69	38	417
ON	Huntsville	CBLT-TV-2	8	8	850000	5,28	1,55	5,22	135	4809
ON	Kapuskasing	CBLT-9	2	2	1000000	6,70	0,47	7,27	23	308
ON	Kearns	CBLT-8	2	2	1000000	2,60	0,78	6,35	385	3777
ON	Kenora	CBWFT-7	2	2	1000000	2,53	0,88	7,28	49	457
ON	North Bay	CFGC-TV-2	2	2	1000000	0,00	0,95	8,16	54	278
ON	North Bay	CBLT-4	4	4	1000000	2,16	0,90	6,33	622	5369
ON	Owen Sound	CIII-TV-4	4	4	1000000	2,54	0,83	7,22	255	2447
ON	Pembroke	CBOT-6	3	3	1000000	3,95	0,97	6,72	198	2540
ON	Pembroke	CHRO-TV	5	5	1000000	0,00	0,92	6,69	1117	5836
ON	Sault Ste Marie	CHBX-TV	2	2	28000	0,00	0,85	6,64	1093	5807
ON	Sault Ste Marie	CBLT-5	5	5	1000000	3,00	0,85	6,64	413	4380
ON	Sudbury	CICI-TV	5	5	8500	0,00	1,34	6,29	1120	5318
ON	Thunder Bay	CHFD-TV	4	4	350000	0,00	1,02	6,39	598	3048
ON	Thunder Bay	CKPR-TV	2	2	350000	0,00	1,02	6,39	598	3048
ON	Timmins	CITO-TV	3	3	1000000	1,40	0,85	7,11	875	6410
ON	Wiarton	CKCO-TV-2	2	2	1000000	0,00	1,09	6,20	1040	5222
ON	Wingham	CKNX-TV	8	8	1000000	2,39	1,76	5,20	490	8574
PE	St Edward	CBCT-1	4	4	19100	6,02	0,40	8,17	23	84
QC	Bearn/Fabre	CKRN-TV-3	3	3	35000	3,22	0,58	6,69	72	211
QC	Blanc-Sablon	CBST-17	3	3	570	7,92	0,43	7,30	22	63
QC	Carleton	CBGAT-14	2	2	130000	4,95	0,61	6,30	301	5268
QC	Chibougamau	CBMCT	4	4	550	0,00	0,41	7,29	35	16
QC	Cloridorme	CHAU-TV-8	11	11	3100	3,52	0,44	8,70	14	15
QC	Jonquière	CFRS-TV	4	4	1300	5,38	0,83	6,20	71	1300
QC	La Tabatière	CBST-13	4	4	280	7,10	0,39	6,70	10	24
QC	La Tuque	CBFT-14	3	3	76000	2,60	0,54	7,26	736	1873
QC	Mont-Laurier	CBFT-2	3	3	1000000	3,14	0,78	6,71	304	1653
QC	Radisson	CH2440	6	6	640	0,00	0,00	7,34	13	128
QC	Rapides-des-Joachims	CBOFT-2	8	8	5000	6,62	0,52	8,70	27	55

PR	CITY	CALL SIGN	DTV CH	NTSC CH	ERP IC Plan (Watt)	NTSC AVG Antenna Gain (dB)	NTSC Peak to AVG (dB)	NTSC System losses (dB)	ATSC TX Power Considered (Watt)	ERP Considered (Watt)
QC	Rimouski	CJBR-TV	2	2	845000	0,00	0,52	6,29	937	2629
QC	Rivière-au-Renard	CBGAT-22	2	2	1000000	1,61	0,57	6,34	112	226
QC	Rouyn-Noranda	CKRN-TV	4	4	14000	0,00	1,07	6,21	1016	5129
QC	Sept-Îles	CBSET	3	3	16500	3,92	0,88	6,31	15	198
QC	St-Michel-des-Saints	CBFT-3	7	7	845000	4,26	0,59	5,20	13	15
QC	St-Pamphile	CBSPT	3	3	7400	4,25	0,41	7,17	20	24
SK	Cypress Hills	CBCP-TV-2	2	2	850000	4,40	0,98	6,21	50	351
SK	Melfort	CKBQ-TV	2	2	850000	1,30	0,84	6,73	127	913
SK	Ponteix	CBCP-TV-3	3	3	17000	2,53	1,04	6,31	110	1005
SK	Prince Albert	CBKFT-2	3	3	850000	2,21	0,80	6,35	65	582
SK	Regina	CKCK-TV	2	2	29000	0,00	1,01	6,65	1130	5784
SK	Saskatoon	CFSK-TV	4	4	1000000	2,68	0,61	7,17	630	6544
SK	Spiritwood	CBKST-13	2	2	850000	3,29	0,68	6,69	104	1227
SK	Stranraer	CFQC-TV-1	3	3	1000000	0,00	0,87	6,21	989	5221
SK	Warmley	CBKT-7	3	3	258700	2,52	1,41	6,40	654	5449

Total = 118