Docket: 2015-3974(IT)G

BETWEEN:

GESTION ACBK INC. (SUCCESSOR BY AMALGAMATION TO HYDRO LMR INC.),

Appellant,

and

HIS MAJESTY THE KING,

Respondent.

[OFFICIAL ENGLISH TRANSLATION]

Appeal heard on November 24 and 25, 2021, and on May 3, 2022, at Montréal, Quebec

Before: The Honourable Justice Sylvain Ouimet

Appearances:

Agent for the Appellant:	André Roy
Counsel for the Respondent:	Christina Ham

JUDGMENT

The appeal from the reassessment made under the *Income Tax Act* for the Appellant's taxation year ending on July 31, 2012, is dismissed, with costs, in accordance with the attached reasons.

Signed at Ottawa, Canada, this 29th day of September 2022.

"Sylvain Ouimet"

Ouimet J.

Translation certified true
on this 16th day of August 2024.

Melissa Paquette

Citation: 2022 TCC 94
Date: 20220929
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REASONS FOR JUDGMENT

Ouimet J.

I. INTRODUCTION

[1] Gestion ACBK inc. ("Gestion ACBK") is appealing a notice of reassessment made on June 18, 2013, by the Minister of National Revenue (the "Minister"). This assessment is for Hydro LMR inc's ("Hydro LMR") taxation year ended on July 31, 2012 (the "year at issue"). Through this assessment, the Minister disallowed the $115,267 in expenditures that Hydro LMR had deducted in computing its income. Hydro LMR had incurred these expenditures when installing a hydrodynamic system to improve energy efficiency in a residential building. The Minister found that these expenditures had not been incurred for scientific research and experimental development ("SR&ED") and were therefore not deductible in computing Hydro LMR's income for the year at issue. Hydro LMR claimed the following expenditures:

Wages	$4,580
Materials consumed	$67,425
Contractors	$43,262
Total	**$115,267**

[2] For the same reason, the Minister also denied Hydro LMR a $37,945 investment tax credit (“ITC”). The credit was claimed for the same expenditures.

[3] The following person testified on behalf of the Appellant at the hearing:

- André Roy, Hydro LMR’s President and Director.

[4] The following persons testified on behalf of the Respondent at the hearing:

- Philippe Desmarais (“Mr. Desmarais”), a Canada Revenue Agency (“CRA”) research and technology advisor; and

- Marie-Claude Giguère, a CRA financial reviewer when the assessment was made.

II. ISSUES

[5] The issues are as follows:

1. Was the Minister correct in disallowing a $115,267 deduction claimed by Hydro LMR for SR&ED expenditures in computing its income?

2. Was the Minister correct in denying the $37,945 in ITCs claimed by Hydro LMR?

[6] To answer these questions, this Court will have to answer the following questions:

1. Were the expenditures disallowed by the Minister incurred for SR&ED within the meaning of subsection 248(1) of the *Income Tax Act* (the “ITA”)?

2. Were these expenditures deductible in computing Hydro LMR’s income under section 37 of the ITA?

III. RELEVANT STATUTORY PROVISIONS

[7] The relevant statutory provisions are as follows:

***Income Tax Act*, R.S.C. 1985, c. 1 (5th Supp.)**

37(1) Where a taxpayer carried on a business in Canada in a taxation year, there may be deducted in computing the taxpayer's income from the business for the year such amount as the taxpayer claims not exceeding the amount, if any, by which the total of

(a) the total of all amounts each of which is an expenditure of a current nature made by the taxpayer in the year or in a preceding taxation year ending after 1973

(i) on scientific research and experimental development related to a business of the taxpayer, carried on in Canada and directly undertaken by the taxpayer,

. . .

(b) the lesser of

(i) the total of all amounts each of which is an expenditure of a capital nature made by the taxpayer (in respect of property acquired that would be depreciable property of the taxpayer if this section were not applicable in respect of the property, other than land or a leasehold interest in land) in the year or in a preceding taxation year ending after 1958 on scientific research and experimental development carried on in Canada, directly undertaken by or on behalf of the taxpayer, and related to a business of the taxpayer, and

(ii) the undepreciated capital cost to the taxpayer of the property so acquired as of the end of the taxation year (before making any deduction under this paragraph in computing the income of the taxpayer for the taxation year);

. . .

127(5) There may be deducted from the tax otherwise payable by a taxpayer under this Part for a taxation year an amount not exceeding the lesser of

(a) the total of

(i) the taxpayer's investment tax credit at the end of the year in respect of property acquired before the end of the year, of the taxpayer's apprenticeship expenditure for the year or a preceding

taxation year, of the taxpayer's child care space amount for the year or a preceding taxation year, of the taxpayer's flow-through mining expenditure for the year or a preceding taxation year, of the taxpayer's pre-production mining expenditure for the year or a preceding taxation year or of the taxpayer's SR&ED qualified expenditure pool at the end of the year or at the end of a preceding taxation year, and,

. . .

127(9) In this section

. . .

investment tax credit of a taxpayer at the end of a taxation year means the amount, if any, by which the total of:

(a) the total of all amounts each of which is the specified percentage of the capital cost to the taxpayer of certified property or qualified property acquired by the taxpayer in the year,

(a.1) 20% of the amount by which the taxpayer's SR&ED qualified expenditure pool at the end of the year exceeds the total of all amounts each of which is the super-allowance benefit amount for the year in respect of the taxpayer in respect of a province,

(a.2) where the taxpayer is an individual (other than a trust), 15% of the taxpayer's flow-through mining expenditures for the year,

(a.3) where the taxpayer is a taxable Canadian corporation, the specified percentage of the taxpayer's pre-production mining expenditure for the year,

(a.4) the total of all amounts each of which is an apprenticeship expenditure of the taxpayer for the taxation year in respect of an eligible apprentice,

(a.5) the child care space amount of the taxpayer for the taxation year,

(b) the total of amounts required by subsection 127(7) or 127(8) to be added in computing the taxpayer's investment tax credit at the end of the year,

(c) the total of all amounts each of which is an amount determined under any of paragraphs (a) to (b) in respect of the taxpayer for any of the 10 taxation years immediately preceding or the 3 taxation years immediately following the year;

(d) [Repealed, 2006, c. 4, s. 75]

(e) the total of all amounts each of which is an amount required by subsection 127(10.1) to be added in computing the taxpayer's investment tax credit at the end of the year or at the end of any of the 10 taxation years immediately preceding or the 3 taxation years immediately following the year,

(e.1) the total of all amounts each of which is the specified percentage of that part of a repayment made by the taxpayer in the year or in any of the 10 taxation years immediately preceding or the 3 taxation years immediately following the year that can reasonably be considered to be a repayment of government assistance, non-government assistance or a contract payment that reduced

> **(i)** the capital cost to the taxpayer of a property under paragraph 127(11.1)(b),
>
> **(ii)** the amount of a qualified expenditure incurred by the taxpayer under paragraph 127(11.1)(c) for taxation years that began before 1996,
>
> **(iii)** the prescribed proxy amount of the taxpayer under paragraph 127(11.1)(f) for taxation years that began before 1996,
>
> **(iv)** a qualified expenditure incurred by the taxpayer under any of subsections 127(18) to 127(20),
>
> **(v)** the amount of a pre-production mining expenditure of the taxpayer under paragraph (11.1)(c.3),
>
> **(vi)** the amount of eligible salary and wages payable by the taxpayer to an eligible apprentice under paragraph (11.1)(c.4), to the extent that that reduction had the effect of reducing the amount of an apprenticeship expenditure of the taxpayer, or
>
> **(vii)** the amount of an eligible child care space expenditure of the taxpayer under paragraph (11.1)(c.5), to the extent that that reduction had the effect of reducing the amount of a child care space amount of the taxpayer, and

(e.2) the total of all amounts each of which is the specified percentage of 1/4 of that part of a repayment made by the taxpayer in the year or in any of the 10 taxation years immediately preceding or the 3 taxation years immediately following the year that can reasonably be considered to be a repayment of government assistance, non-government assistance or a contract payment that reduced

(i) the amount of a qualified expenditure incurred by the taxpayer under paragraph 127(11.1)(e) for taxation years that began before 1996, or

(ii) a qualified expenditure incurred by the taxpayer under any of subsections 127(18) to 127(20),

in respect of first term shared-use-equipment or second term shared-use-equipment, and, for that purpose, a repayment made by the taxpayer in any taxation year preceding the first taxation year that ends coincidentally with the first period or the second period in respect of first term shared-use-equipment or second term shared-use-equipment, respectively, is deemed to have been incurred by the taxpayer in that first taxation year,

exceeds the total of

(f) the total of all amounts each of which is an amount deducted under subsection 127(5) from the tax otherwise payable under this Part by the taxpayer for a preceding taxation year in respect of property acquired, or an expenditure incurred, in the year or in any of the 10 taxation years immediately preceding or the 2 taxation years immediately following the year, or in respect of the taxpayer's SR&ED qualified expenditure pool at the end of such a year,

(g) the total of all amounts each of which is an amount required by subsection 127(6) to be deducted in computing the taxpayer's investment tax credit

(i) at the end of the year, or

(ii) [Repealed, 1996, c. 21, s. 30(15)]

(iii) at the end of any of the 9 taxation years immediately preceding or the 3 taxation years immediately following the year,

(h) the total of all amounts each of which is an amount required by subsection 127(7) to be deducted in computing the taxpayer's investment tax credit

(i) at the end of the year, or

(ii) [Repealed, 1996, c. 21, s. 30(16)]

(iii) at the end of any of the 10 taxation years immediately preceding or the 3 taxation years immediately following the year,

(i) the total of all amounts each of which is an amount claimed under subparagraph 192(2)(a)(ii) by the taxpayer for the year or a preceding

taxation year in respect of property acquired, or an expenditure made, in the year or the 10 taxation years immediately preceding the year,

(j) where the taxpayer is a corporation control of which has been acquired by a person or group of persons at any time before the end of the year, the amount determined under subsection 127(9.1) in respect of the taxpayer, and

(k) where the taxpayer is a corporation control of which has been acquired by a person or group of persons at any time after the end of the year, the amount determined under subsection 127(9.2) in respect of the taxpayer;

except that no amount shall be included in the total determined under any of paragraphs (a) to (e.2) in respect of an outlay, expense or expenditure that would, if this Act were read without reference to subsections 127(26) and 78(4), be made or incurred by the taxpayer in the course of earning income in a particular taxation year, and no amount shall be added under paragraph (b) in computing the taxpayer's investment tax credit at the end of a particular taxation year in respect of an outlay, expense or expenditure made or incurred by a trust or a partnership in the course of earning income, if

(l) any of the income is exempt income or is exempt from tax under this Part,

(m) the taxpayer does not file with the Minister a prescribed form containing prescribed information in respect of the amount on or before the day that is one year after the taxpayer's filing-due date for the particular year;

. . .

qualified expenditure incurred by a taxpayer in a taxation year means

(a) an amount that is an expenditure incurred in the year by the taxpayer in respect of scientific research and experimental development that is an expenditure

(i) for first term shared-use-equipment or second term shared-use-equipment,

(ii) described in paragraph 37(1)(a), or

(iii) described in subparagraph 37(1)(b)(i), or

(b) a prescribed proxy amount of the taxpayer for the year (which, for the purpose of paragraph (e), is deemed to be an amount incurred in the year),

. . .

SR&ED qualified expenditure pool of a taxpayer at the end of a taxation year means the amount determined by the formula

A + B – C

where

A is the total of all amounts each of which is a qualified expenditure incurred by the taxpayer in the year,

B is the total of all amounts each of which is an amount determined under paragraph 127(13)(e) for the year in respect of the taxpayer, and in respect of which the taxpayer files with the Minister a prescribed form containing prescribed information by the day that is 12 months after the taxpayer's filing-due date for the year, and

C is the total of all amounts each of which is an amount determined under paragraph 127(13)(d) for the year in respect of the taxpayer.

. . .

248(1) In this Act,

. . .

scientific research and experimental development means systematic investigation or search that is carried out in a field of science or technology by means of experiment or analysis and that is

> **(a)** basic research, namely, work undertaken for the advancement of scientific knowledge without a specific practical application in view,
>
> **(b)** applied research, namely, work undertaken for the advancement of scientific knowledge with a specific practical application in view, or
>
> **(c)** experimental development, namely, work undertaken for the purpose of achieving technological advancement for the purpose of creating new, or improving existing, materials, devices, products or processes, including incremental improvements thereto,

and, in applying this definition in respect of a taxpayer, includes

> **(d)** work undertaken by or on behalf of the taxpayer with respect to engineering, design, operations research, mathematical analysis, computer programming, data collection, testing or psychological research, where the work is commensurate with the needs, and directly in support, of work described in paragraph (a), (b), or (c) that is undertaken in Canada by or on behalf of the taxpayer,

but does not include work with respect to

> **(e)** market research or sales promotion,
>
> **(f)** quality control or routine testing of materials, devices, products or processes,
>
> **(g)** research in the social sciences or the humanities,
>
> **(h)** prospecting, exploring or drilling for, or producing, minerals, petroleum or natural gas,
>
> **(i)** the commercial production of a new or improved material, device or product or the commercial use of a new or improved process,
>
> **(j)** style changes, or
>
> **(k)** routine data collection.

***Income Tax Regulations*, C.R.C. c. 945:**

2900(4) For the purposes of the definition ***qualified expenditure*** in subsection 127(9) of the Act, the prescribed proxy amount of a taxpayer for a taxation year, in respect of a business, in respect of which the taxpayer elects under clause 37(8)(a)(ii)(B) of the Act is 65% of the total of all amounts each of which is that portion of the amount incurred in the year by the taxpayer in respect of salary or wages of an employee of the taxpayer who is directly engaged in scientific research and experimental development carried on in Canada that can reasonably be considered to relate to the scientific research and experimental development having regard to the time spent by the employee on the scientific research and experimental development.

IV. FACTS

[8] André Roy ("Mr. Roy") was the president and sole director of Hydro LMR during the period at issue. He is an electrical mechanic by trade who specializes in automation.[1] During that period, Mr. Roy's work mainly involved designing, installing and programming automated systems for clients in the agri-food industry.[2]

[9] On an unspecified date prior to the year at issue, Dominic Laperle ("Mr. Laperle") had installed a system known as a [TRANSLATION] "hydrodynamic system to improve energy efficiency in a building, construction methods and

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[1] Transcript of the November 24, 2021, hearing, at pages 57 and 59.
[2] *Ibid.*, at page 59.

corresponding uses" in a residence in Saint-Césaire, Quebec. Mr. Laperle received a patent for this system.[3] According to Mr. Roy's testimony, Mr. Laperle's system reduces a building's environmental impact by making it energy self-sufficient.

[10] After the construction of the residence was completed and the hydrodynamic system was installed, Marc Brunet ("Mr. Brunet"), from the Centre de recherche industrielle du Québec ("CRIQ"), contacted Mr. Roy to ask him if he could improve Mr. Laperle's system. Mr. Brunet asked him to accompany him on a tour of the residence in Saint-Césaire. After the visit, Mr. Roy became interested in Mr. Laperle's system and decided, through Hydro LMR, to purchase land in Saint-Alphonse-de-Granby, Quebec, to build a triplex there and install an improved version of Mr. Laperle's system.

[11] To this end, Hydro LMR created a project called [TRANSLATION] "Study and Analysis of a Thermal Storage System", for which it claimed SR&ED expenditures and an ITC for the year at issue.[4] Hydro LMR used the proxy method to compute the SR&ED expenditures.[5]

[12] The expenditures disallowed by the Minister were incurred by Hydro LMR during the construction and installation of an improved version of Mr. Laperle's system in the triplex.

V. DISCUSSION

A. Preliminary issue

[13] On October 1, 2017, Hydro LMR amalgamated with three other companies under the *Business Corporations Act*[6] (the "BCA"). After this amalgamation, Gestion ACBK was incorporated and Hydro LMR's registration was cancelled *ex officio* on October 1, 2017. The Respondent argues that under subsection 286(2) of the BCA, Gestion ACBK retains the rights of Hydro LMR and that, consequently, it may be a party to judicial proceedings to which Hydro LMR was a party.[7] Section 286 of the BCA reads as follows:

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[3] *Ibid.*, at page 55, Exhibit A-2, and Respondent's Book, Exhibit I-1, Tab 3.
[4] Reply to the Notice of Appeal, at paragraph 8(b).
[5] *Ibid.*, at paragraph 8(d).
[6] *Business Corporations Act*, CQLR c. S-31.1 ("BCA").
[7] See *Ville de Sainte-Marthe-sur-le-Lac c. Experts-conseils RB inc.*, 2017 QCCA 381, at paragraphs 32 and 33.

> A certificate of amalgamation, issued by the enterprise registrar in accordance with Chapter XVIII, attests the amalgamation of the corporations as of the date and, if applicable, the time shown on the certificate.
>
> As of that time, the amalgamating corporations are continued as one corporation and, as of that time, their patrimonies are joined together to form the patrimony of the amalgamated corporation. The rights and obligations of the amalgamating corporations become rights and obligations of the amalgamated corporation and the latter becomes a party to any judicial or administrative proceeding to which the amalgamating corporations were parties.
>
> [Emphasis added.]

[14] Consequently, the Respondent maintains that the style of cause should be amended to replace Hydro LMR with [TRANSLATION] "Gestion ACBK inc. (successor by amalgamation to Hydro LMR inc.)". The Respondent argues that this Court should follow the approach taken in *Imperial Tobacco Canada Limited v. The Queen*[8] and in *Canwest Mediaworks Inc. v. The Queen*.[9] In those decisions, such a style of cause was used in similar circumstances. The Appellant does not object to the amendment to the style of cause proposed by the Respondent.[10]

[15] Given the submissions of the parties, this Court accepts the Respondent's request. The initial style of cause will therefore be replaced with the following: *Gestion ACBK inc.* (*successor by amalgamation to Hydro LMR inc.*) *v. Her Majesty the Queen*.

B. Total amount of SR&ED expenditures at issue in this case

[16] At the hearing, Mr. Roy admitted that certain expenditures incurred by Hydro LMR during the construction and installation of the system were not SR&ED qualified expenditures. In particular, at the hearing, Mr. Roy decided to no longer contest the disallowance of the $667 and $59 deductions claimed for materials consumed.[11] In addition, Mr. Roy also decided to no longer contest the disallowance of the $8,490 deduction for the purchase of Mr. Laperle's intellectual property.[12] Consequently, the total amount of the SR&ED expenditures claimed by the Appellant is $106,051. These expenditures are as follows:

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[8] *Imperial Tobacco Canada Limited v. The Queen*, 2007 TCC 636.
[9] *Canwest Mediaworks Inc. v. The Queen*, 2006 TCC 579.
[10] Transcript of the November 24, 2021, hearing, *supra* (note 1), at page 9.
[11] *Ibid.*, at page 26.
[12] Transcript of the May 3, 2022, hearing, at pages 83 to 87.

Wages	$4,580
Materials consumed	$66,699
Contractors	$34,772
Total	**$106,051**

C. Was the Minister correct in disallowing the $106,051 deduction claimed by Hydro LMR for SR&ED expenditures in computing its income for the taxation year at issue?

[17] In order for expenditures to be deductible from a business's income as SR&ED expenditures, both of the following conditions must be met:

- The taxpayer must demonstrate that the expenditures were incurred for SR&ED within the meaning of subsection 248(1) of the ITA; and
- The taxpayer must demonstrate that the expenditures are deductible under section 37 of the ITA.

(1) Was the Minister correct in determining that the expenditures of $106,051 were not incurred for SR&ED within the meaning of subsection 248(1) of the ITA?

[18] The term "scientific research and experimental development" is defined in subsection 248(1) of the ITA. According to this definition, SR&ED means a systematic investigation or search that is carried out in a field of science or technology by means of experiment or analysis. It must be basic research, applied research or experimental development. The relevant excerpt of subsection 248(1) reads as follows:

> **scientific research and experimental development** means systematic investigation or search that is carried out in a field of science or technology by means of experiment or analysis and that is
>
> > **(a)** basic research, namely, work undertaken for the advancement of scientific knowledge without a specific practical application in view,
> >
> > **(b)** applied research, namely, work undertaken for the advancement of scientific knowledge with a specific practical application in view, or
> >
> > **(c)** experimental development, namely, work undertaken for the purpose of achieving technological advancement for the purpose of creating new, or

> improving existing, materials, devices, products or processes, including incremental improvements thereto,
>
> . . .

[19] In applying this definition, SR&ED includes work undertaken by or on behalf of the taxpayer with respect to engineering, design, operations research, mathematical analysis, computer programming, data collection, testing or psychological research, where the work is commensurate with the needs, and directly in support, of work described in paragraph 248(1)(a), (b), or (c) of the ITA that is undertaken in Canada by or on behalf of the taxpayer.[13]

[20] Work with respect to certain activities does not constitute SR&ED for the purposes of this definition. These activities are as follows:

- Market research or sales promotion;
- Quality control or routine testing of materials, devices, products or processes;
- Research in the social sciences or the humanities;
- Prospecting, exploring or drilling for, or producing, minerals, petroleum or natural gas;
- The commercial production of a new or improved material, device or product or the commercial use of a new or improved process;
- Style changes; or
- Routine data collection.[14]

[21] In this case, this Court must determine whether the activities carried out by Hydro LMR constitute SR&ED. In particular, this Court must determine whether Hydro LMR undertook "experimental development" within the meaning of paragraph (c) of subsection 248(1) of the ITA. Consequently, this Court must determine whether the work undertaken by Hydro LMR to design and install an improved version of Mr. Laperle's system in the triplex constitutes "experimental development" within the meaning of that paragraph.

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[13] Subsection 248(1) of the ITA, definition of the term "scientific research and experimental development", paragraph (d).
[14] Subsection 248(1), "scientific research and experimental development", paragraphs (e) to (k).

[22] In *Northwest Hydraulic Consultants Ltd. v. The Queen*,[15] this Court set out the criteria that must be used to determine whether a taxpayer has undertaken "experimental development" within the meaning of the ITA. These criteria, which were restated and confirmed by the Federal Court of Appeal in *CW Agencies Inc. v. The Queen*,[16] are as follows:

1- Was there a technological risk or uncertainty which could not be removed by routine engineering or standard procedures?

2- Did the person claiming to be doing SR&ED formulate hypotheses specifically aimed at reducing or eliminating that technological uncertainty?

3- Did the procedure adopted accord with the total discipline of the scientific method including the formulation, testing and modification of hypotheses?

4- Did the process result in a technological advancement?

5- Was a detailed record of the hypotheses tested, and results kept as the work progressed?[17]

[23] These five criteria must all be satisfied for this Court to find that the activities carried on by the taxpayer constitute "experimental development".[18]

[24] In *Northwest Hydraulic*, this Court provided the following explanation of the term "technological uncertainty" when applying the relevant provisions of the ITA:

> (a) Implicit in the term "technical risk or uncertainty" in this context is the requirement that it be a type of uncertainty that cannot be removed by routine engineering or standard procedures. I am not talking about the fact that whenever a problem is identified there may be some doubt concerning the way in which it will be solved. If the resolution of the problem is reasonably predictable using standard procedure or routine engineering there is no technological uncertainty as used in this context.
>
> (b) What is "routine engineering"? It is this question, (as well as that relating to technological advancement) that appears to have divided the experts more than any

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[15] *Northwest Hydraulic Consultants Ltd. v. The Queen*, [1998] T.C.J. No. 340 (QL), at paragraph 16 ["*Northwest Hydraulic*"].

[16] *CW Agencies Inc. v. The Queen*, 2001 FCA 393, at paragraph 17 ["*CW Agencies Inc.*"]. See also the decision of the Federal Court of Appeal in *RIS-Christie Ltd. v. Canada*, 1998 CanLII 8876, [1999] 2 F.C. F-30 ["*RIS-Christie*"].

[17] *CW Agencies Inc.*, *supra* (note 16), at paragraph 17.

[18] *Béton mobile du Québec Inc. v. The Queen*, 2019 TCC 278, at paragraph 39.

> other. Briefly it describes techniques, procedures and data that are generally accessible to competent professionals in the field.[19]
>
> [Emphasis added.]

[25] Consequently, in order to demonstrate that Hydro LMR's expenditures were for SR&ED within the meaning of the ITA, the Appellant must demonstrate, on a balance of probabilities, that there was a technological risk or uncertainty that could not be removed by routine engineering or standard procedures.[20]

[26] In this case, in order to be able to install an improved version of Mr. Laperle's hydrodynamic system in the triplex, Mr. Roy first purchased Mr. Laperle's patent for the system. He also used Mr. Laperle's handwritten notes to design and install this second prototype of the hydrodynamic system in the triplex. Before construction started on the triplex, Mr. Roy met with Daniel Rousse ("Mr. Rousse"), a researcher who held the Industrial Research Chair in Energy and Efficiency at the École de technologie supérieure ("ÉTS"), to perform a digital simulation of his system. After this meeting, Mr. Roy obtained the ÉTS report with the results of the simulation. Subsequently, Mr. Roy decided to build a [TRANSLATION] "full-scale" prototype of his system, which he integrated into the triplex.

[27] The system designed by Mr. Roy included solar panels installed on the roof of the building, concrete water tanks filled with gravel buried under the building's concrete basement floor, a heat pump, a radiant floor heating system, a control panel (computer) and tank water temperature probes.

[28] Mr. Roy stated that he used Mr. Laperle's notes and patent to design his [TRANSLATION] "full-scale" prototype. However, he identified a major design flaw in Mr. Laperle's system. According to Mr. Roy, the temperature of the water in the tanks was not suitable; the water was far too cold and would freeze. This prevented the pump used to transport water to the solar panels installed on the roof of the building from working properly. Mr. Roy also stated that the causes of the problem were the size of the tanks, the lack of a temperature probe, and the programming of the control panel.

[29] Mr. Roy testified that when designing his system, he faced two technological uncertainties: the size of the water tanks and the temperature of the water that they

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[19] *Northwest Hydraulic*, *supra* (note 15), at paragraph 16.

[20] *Tacto Neuro Sensory Devices Inc./Appareils Neurosensoriels Tacto Inc. v. The Queen*, 2004 TCC 341, at paragraph 11.

contained.[21] Using the data from the ÉTS report to solve these problems, Mr. Roy changed the size of the basins and installed temperature probes and additional valves. He therefore changed the size of the basins used by Mr. Laperle and inserted the smaller basin inside the larger one. He also installed a third basin (a conventional water heater) outside the building and connected it to the system. Finally, he also installed and programmed the control panel that controls the water pump. According to Mr. Roy, these uncertainties could not be removed by routine engineering or standard procedures.

[30] The evidence shows that Mr. Roy used standard procedures to attempt to resolve the two technological uncertainties that he faced. During his testimony, Mr. Roy did not specifically describe the techniques that he used to try to overcome these uncertainties, either during the design or during the construction of his system. The evidence does not show that changing the sizes of the basins, installing temperature probes, installing valves, and designing and installing the control panel required practices not commonly used at the time.

[31] According to Mr. Desmarais's testimony, Mr. Roy used known thermodynamic principles to measure energy exchanges in a system. Mr. Desmarais also stated that it was possible to measure the heat exchange between the basins and to model the proposed system using mathematical concepts and equations known at the time in order to estimate the appropriate dimensions of the basins. A small scale model could also have been used to test it.

[32] Finally, Mr. Desmarais also stated that Mr. Laperle's patent made reference to earlier thermal storage patents, which led him to conclude that there were systems similar to the one designed by Hydro LMR since the 1980s.

[33] As mentioned above, in this case, this Court must determine whether the work undertaken by Hydro LMR to design and install the second improved prototype of Mr. Laperle's hydrodynamic system in the triplex constitutes "experimental development" within the meaning of subsection 248(1) of the ITA. The Appellant has not demonstrated that the technological uncertainties faced by Hydro LMR during the design and installation of its hydrodynamic system could not be removed through routine engineering or standard procedures. This Court finds that Mr. Roy used standard procedures to attempt to resolve the two uncertainties he faced.

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[21] Transcript of November 25, 2021, hearing, pages 162 and 163.

[34] Consequently, this Court finds that the work undertaken by Hydro LMR during the design and installation of the hydrodynamic system in the triplex does not constitute SR&ED within the meaning of the ITA.

(2) Are the expenditures deductible under section 37 of the ITA?

[35] Under paragraph 37(1)(a) of the ITA, a taxpayer who carries on a business in Canada and who has undertaken SR&ED within the meaning of subsection 248(1) of the ITA may deduct certain expenditures in computing income from this business.

[36] Expenditures that may be deducted depend on a choice that the taxpayer must make for each taxation year. For each taxation year, the taxpayer can elect to use the "traditional method" or the "proxy method". In this case, Hydro LMR elected to use the "proxy method" for the year at issue, under clause 37(8)(a)(ii)(B) of the ITA. Pursuant to this provision, the following expenditures are SR&ED expenditures:

1- An expenditure of a current nature for, and all or substantially all of which was attributable to, the lease of premises, facilities or equipment for the prosecution of scientific research and experimental development in Canada, other than an expenditure in respect of general purpose office equipment or furniture;

2- An expenditure in respect of the prosecution of scientific research and experimental development in Canada directly undertaken on behalf of the taxpayer;

3- An expenditure described in subclause (A)(III), other than an expenditure in respect of general purpose office equipment or furniture;

4- That portion of an expenditure made in respect of an expense incurred in the year for salary or wages of an employee who is directly engaged in scientific research and experimental development in Canada that can reasonably be considered to relate to such work having regard to the time spent by the employee thereon, and, for this purpose, where that portion is all or substantially all of the expenditure, that portion shall be deemed to be the amount of the expenditure;

5- The cost of materials consumed in the prosecution of scientific research and experimental development in Canada; or

6- ½ of any other expenditure of a current nature in respect of the lease of premises, facilities or equipment used primarily for the prosecution of scientific research and experimental development in Canada, other than an expenditure in respect of general purpose office equipment or furniture.[22]

[37] Because this Court found that the work related to the design and installation of the hydrodynamic system in the triplex does not constitute SR&ED, the first condition to enable the expenditures incurred by Hydro LMR for this work to be deductible in the computation of its income has not been satisfied. Therefore, it is not necessary for this Court to consider the issue of the deduction of expenditures under section 37 of the ITA. Given that Hydro LMR did not incur the expenditures for SR&ED, they did not constitute SR&ED qualified expenditures.

D. Was the Minister correct in disallowing a $37,945 ITC claimed by Hydro LMR?

[38] In addition to being deductible in computing a taxpayer's income, certain SR&ED expenditures incurred by the taxpayer also entitle the taxpayer to an ITC computed under subsection 127(5) of the ITA. To apply this subsection, the taxpayer's ITC must first be determined under subsection 127(9) of the ITA. The amount of the ITC depends on the "SR&ED qualified expenditure pool", which includes any "qualified expenditure" incurred by the taxpayer during the year.

[39] Qualified expenditures, as defined in subsection 127(9) of the ITA, include expenditures incurred in respect of SR&ED that are expenditures for first term shared-use-equipment or second term shared-use-equipment, expenditures of a current nature described in paragraph 37(1)(a) of the ITA, and expenditures of a capital nature described in subparagraph 37(1)(b)(i) of the ITA. Furthermore, where the taxpayer elects to use the "proxy method", as is the case here, qualified expenditures also include a proxy amount described in the Regulations. The proxy amount is set out in subsection 2900(4) of the *Income Tax Regulations*. In the period at issue, the prescribed proxy amount was 65% of the amounts incurred in the year by the taxpayer in respect of salary or wages of an employee of the taxpayer who is directly engaged in SR&ED carried on in Canada that can reasonably be considered to relate to the SR&ED.

[40] Therefore, where this Court finds that a taxpayer's expenditures were not incurred for SR&ED, the taxpayer is not entitled to an ITC for those expenditures.

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[22] Clause 37(8)(a)(ii)(B) of the ITA (in the applicable version).

As this Court found that the expenditures that Hydro LMR claimed were not incurred for this kind of work, Hydro LMR is not entitled to an ITC of $37,945.

VI. CONCLUSION

[41] Because this Court found that, on a balance of probabilities, the expenditures of $115,267 were not incurred for SR&ED within the meaning of subsection 248(1) of the ITA, the Minister properly disallowed the deduction of these expenditures in computing the Appellant's income. Accordingly, and for the same reason, the Minister was correct in disallowing the $37,945 in ITCs claimed by Hydro LMR.

[42] For these reasons, the appeal is dismissed with costs.

Signed at Ottawa, Canada, this 29th day of September 2022.

"Sylvain Ouimet"

Ouimet J.

Translation certified true
on this 16th day of August 2024.

Melissa Paquette

CITATION:	2022 TCC 94
COURT FILE NO.:	2015-3974(IT)G
STYLE OF CAUSE:	GESTION ACBK INC. (SUCCESSOR BY AMALGAMATION TO HYDRO LMR INC.) AND HIS MAJESTY THE KING
PLACE OF HEARING:	Montréal, Quebec
DATES OF HEARING:	November 24 and 25, 2021, and May 3, 2022
REASONS FOR JUDGMENT BY:	The Honourable Justice Sylvain Ouimet
DATE OF JUDGMENT:	September 29, 2022

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