

## Vicki Albertson

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**From:** Certification Bureau / Bureau homologation (IC) <certificationbureau-bureauhomologation@ised-isde.gc.ca>  
**Sent:** Thursday, August 11, 2022 11:20 AM  
**To:** Vicki Albertson  
**Subject:** RE: Question about "electrically identical" and the need for one IC ID vs two

Good Day Vicki,

ISED will allow this time due to low risk but this case should not be translated into general acceptance of changes such as these for other products.

Regards,

**Engineering, Planning and Standards Branch (14)**  
Innovation, Science and Economic Development Canada / Government of Canada  
Tel: 613-990-4218 / TTY: 1-866-694-8389

**Direction générale du génie, de la planification et des normes (14)**  
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**From:** Vicki Albertson <vicki.albertson@element.com>  
**Sent:** Wednesday, August 10, 2022 2:01 PM  
**To:** Certification Bureau / Bureau homologation (IC) <certificationbureau-bureauhomologation@ised-isde.gc.ca>  
**Subject:** RE: Question about "electrically identical" and the need for one IC ID vs two

Hi,

Please see comments in RED

Let me know if you need more information.

Thanks



Vicki Albertson

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**From:** Certification Bureau / Bureau homologation (IC) <[certificationbureau-bureauhomologation@ised-isde.gc.ca](mailto:certificationbureau-bureauhomologation@ised-isde.gc.ca)>  
**Sent:** Wednesday, August 10, 2022 7:46 AM  
**To:** Vicki Albertson <[vicki.albertson@element.com](mailto:vicki.albertson@element.com)>  
**Subject:** RE: Question about "electrically identical" and the need for one IC ID vs two

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Good Day Vicki,

1. ISED allows different antennas and/or switching circuitry to the antenna for HVINs within a family certification.
2. ISED is not concerned with different power levels for each HVIN within a family as this is permitted.
3. ISED does not allow changes to RF circuitry between HVINs within a family certification.

This change could fall under either of these conditions depending on how and where the change is occurring. ISED requires further information to decide and needs the two board layouts with components to compare. Please see attached excerpt from Schematics – it has an arrow pointing to the component that is changing, and there is a table below to indicate the values for the two model variants. Also attached is the datasheet for the attenuator.

ISED needs to know if the attenuation is achieved with passive components only? Yes, it is passive  
Has the product been fully retested? Both variants will be fully tested

Regards,

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**From:** Vicki Albertson <[vicki.albertson@element.com](mailto:vicki.albertson@element.com)>  
**Sent:** Tuesday, August 9, 2022 4:52 PM  
**To:** [ic.certificationbureau-bureauhomologation.ic@canada.ca](mailto:ic.certificationbureau-bureauhomologation.ic@canada.ca)  
**Subject:** Question about "electrically identical" and the need for one IC ID vs two

Hi,

ISED is pretty specific about devices being electrically identical. RSP 100 section 9.3 allows family certification for minor PCB modifications that improve existing frequency band/technologies and/or add non-RF features. It further states that all product versions within the family must be identical or have differences permitted under the permissive change requirements.

An applicant has an unlicensed transmitter where the only change done to the transmitter circuitry is to insert a 10 dB attenuator or a zero ohm resistor (0dB attenuator) between the antenna matching circuitry and the antenna. No other differences exist in the device. The result is two models of the same otherwise identical device, one at a 10 dB lower power than the other.

The question relates to the insertion of the attenuator and how to file for certification. Because of the 10 dB difference in power due to either a 10dB or 0dB (0 ohm resistor) being inserted, could this be two different model numbers under one family certification, or, because the difference in value of the inserted dB pad resulting in 10dB difference in power levels, would this require two different ISED numbers?

Please advise.

Thanks,

Vicki



**Vicki Albertson**

Certification Manager

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