Mechanical Committee Meeting

September 25, 2024

People. Goods. Canada moves by rail.





Competition Law Compliance Policy

STATEMENT

The RAC is committed to compliance with all **competition laws** applicable in Canada, including Canada's *Competition Act.*

Under the leadership of its Board of Directors, the RAC carries out its activities in strict compliance with all **competition laws**, provides guidance to its committees and its employees on how to comply with these laws, and promotes with them the importance and value to the RAC of complying with them.

The RAC Corporate Secretary ensures that RAC, its committees and its staff are familiar and comply with this policy.

COMPETITION LAW

Competition laws are designed to maintain and encourage competition in the marketplace. Non-compliance with the **competition laws** relating to improper coordination among competitors could constitute a criminal offence to which significant fines and prison terms can be attached, and for which significant damages can be awarded in private lawsuits, including large class actions.

RAC is a forum for railway members to exchange information and views on the railway sector. Particularly because RAC is an association that represents most of the players in the rail sector in Canada, including many that compete with one another, any activity it conducts must be in strict accordance with the **competition laws**, and avoid even the perception of possible improper conduct.

PROHIBITED ACTIVITIES

Due to the presence of multiple competing entities in RAC, any activity, including discussions or agreements that relate, directly or indirectly, to the following "**Prohibited Topics**" are strictly prohibited:

- Prices (rates) charged to shippers for services provided by members of the RAC
- Prices (costs) paid to suppliers for services provided to members of the RAC
- Any other conditions associated with services provided to shippers or received from suppliers of RAC members, including discounts, rebates, etc. and level of service provisions
- Customer or territory allocation
- Limitation of supply of services provided by RAC members to their customers

GUIDANCE

Any activity, including discussions or agreements that could even remotely be construed as relating to the above Prohibited Topics, cannot take place at the RAC or any of its committees or any meeting organized or attended by RAC staff, or otherwise among RAC members.

To ensure compliance with these rules, when meeting, members of a RAC committee or of the Board of Directors must:

- □ Have a pre-set agenda and take minutes, recording resolutions adopted and summarizing the essentials of conversations that took place.
- Limit themselves to issues identified on the agenda, except if circumstances call for other issues to be addressed, in which case careful notes of the additional issues discussed must be recorded.
- If any participant believes that Prohibited Topics have been raised or discussed, they must advise all participants of their concern and any discussion relating to that issue be ceased immediately pending legal advice.
- Require legal advice if any issue to be discussed might cause the members to believe that competition laws could be infringed.
- Suspend or even postpone to a later date discussions on such issues if legal advice cannot be sought in a timely manner.

Staff of the RAC shall in their duties ensure the confidentiality of information brought to their attention by members, avoid conflict of interest or situations that would discredit the RAC, unless doing so could violate the **competition laws**.

Updated May 3, 2021



RAC MECHANICAL COMMITTEE MEETING

Wednesday, September 25, 2024 11:00 AM to 12:00 PM (ET)

Microsoft Teams

Click here to join the meeting

AGENDA

	SCHEDULE	DISCUSSION LEADER	TIME
1.	Welcome & Introductions 1.1 Competition Law Compliance Policy – Forward statement	B. Murphy (Chair) K. Ouimet	11:00 11:05»
2.	Approval of Minutes March 26, 2024	B. Murphy	11:10 »D
3.	Broken Wheels Discussion	All	11:15
4.	Other Business	All	11:25
5.	Next Meeting	B. Murphy	12:00

Supporting material provided **Decision Required** »

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RAC MECHANICAL COMMITTEE MEETING DRAFT MINUTES 24-01 Virtual Meeting March 26, 2024; 11:00 HOURS (ET)

In Attendance

Brianna Bowman, RAC Kevin Hill, Metrolinx Lonnie Little, ONTC Sreechakradhar Masabattula, CN Dave McMullen, QNS&L Braden Murphy, CPKC Joe Naso, RAC Kevin Ouimet, RAC

Regrets

Stéphane Boudreault, QNS&L Kevin Clearbout, Metrolinx Laszlo Czihaly, SRY Keven D'amours QNS&L Dave Dallaire, GWCI Murray MacBeth, GWCI Kyle Mulligan, CPKC Lukasz Szymsiak, VIA

1. Welcome & Introductions

Mr. Ouimet noted that the required quorum was achieved and called the meeting to order in accordance with the Railway Association of Canada (RAC) bylaws. Mr. Ouimet read Agenda item 1.1 Competition Law Compliance Policy – Forward statement.

2. Approval of Minutes October 13, 2023

It was moved by Mr. Little and seconded by Mr. McMullen to approve the minutes of the October 13, 2023, meeting.

3. Committee Chair and Vice-Chair

RESOLUTION: It was moved by the committee to nominate Braden Murphy, CPKC as Chair of the *RAC Mechanical Committee*, and 2 years thereafter as per the Terms of Reference, effective until March 26, 2026. *Officers: There shall be a Chair and Vice Chair elected by its membership. The terms of office shall normally be 2 years.*

RESOLUTION: It was moved by the committee to nominate Sreechakradhar Masabattula, CN as Vice-Chair of the *RAC Mechanical Committee* and 2 years thereafter as per the Terms of Reference, effective until March 26, 2026. *Officers: There shall be a Chair and Vice Chair elected by its membership. The terms of office shall normally be 2 years.*

4. Broken Wheel Discussion

Mr. Braden Murphy (CPKC) will be replacing Kyle Mulligan (CPKC) on the committee. Mr. Murphy will provide an update on broken wheels at the next meeting.



5. Other Business

Hot Box Detectors - CPKC had an event where a traction motor on a locomotive caught fire. That locomotive was having issues previously, so the crew cut it out, but the crew also cut out the speed sensor which is against protocol. The locomotive caught fire, dragged, and derailed. At the time CPKC hadn't been monitoring the hot box detectors for this type of issue. But since this incident CPKC has developed a new algorithm that can now detect this kind of condition which will hopefully prevent this type of event from happening in the future. The new algorithm looks at locomotives and compares the trend of each of its axels and flags if one of the axels is warm.

Idling – Mr. Hill from Metrolinx ask the committee how their companies are managing their locomotive emissions regulations regarding idling. Metrolinx is finding it challenging to adhere to the stringent rules. Committee members shared information about their operations.

- Mr. Hill (Metrolinx) noted that Metrolinx has embedded on-board technology that they call their Throttle Control Program, which optimizes the throttle modulation throughout the territory, however Mr. Hill says it is not enough. Metrolinx supplements its locomotives through wayside power. High voltage power is distributed from the wayside cabinets through the consist so that their locomotives have heating, cooling, and lights on their coaches for their passengers. As well as ensures that the intrusions alarms are continuously working. Not being allowed to idle longer than 30 minutes really impacts Metrolinx operations. Mr. Hill noted that if Metrolinx could cut out the strict idling regulations the company would have the opportunity to save roughly 1-2 million dollars in fuel consumption alone.
- Mr. Murphy (CPKC) noted that CPKC doesn't monitor idling reports all that closely. CPKC focuses more on making sure that the automatic idling systems are functioning correctly and if not, they are sent to the shop for repair. CPKC also reports fuel consumption per gross ton mile quarterly as well as focuses on fuel trip optimization while locomotives are running.
- Mr. McMullen (QNS&L) noted that QNS&L is an extremely northern railway and as such winter season for them is half of the year. QNS&L predominantly run SD40 locomotives with the old 645 engine. QNS&L has implemented two strategies to help increase their fuel savings. The first strategy was to install a starter abutment preventer from a company called Inner Pro. This has really reduced the amount of SD40 locomotives that will not restart. In parallel to that QNS&L have installed a Germain system called AST. AST is a fuel boiler that uses the fuel of the locomotive to adjust the heat and keep the locomotives engines cool during the wintertime. The system is working very well and has helped saved fuel costs during the winter months.
- Mr. Masabattula (CN) noted that CN uses a similar technology as QNS&L called a ZTR Kick starter, which is another capacitor.

Winter Operations – Mr. Murphy (CPKC) asked if any railroads use any kind of special lubricants in their air systems for cars that are designed for the lower temperatures. He noted that he has noticed issues with brakes sticking and things just working as well in the colder temperatures. Railroads indicated that they do not use lubricants.

• Mr. Murphy suggested something to look at for next winter season might be methanol injection at a certain temperature as additional redundancy to dry and prevent the air from freezing. Would have to check if there is an environmental concern of methanol discharge into the atmosphere.



7DFL Engine Fires – Mr. McMullen (QNS&L) asked what other railroads are doing if anything to prevent 7DFL engine fires. QNS&L lost a locomotive last year because of an engine fire. A leak occurred on a high-pressure line several hours before the engine was lit, which caused the engine to burn for 5 plus hours once it was lit. Then just a few weeks ago QNS&L had another engine fire but luckily this time it was limited to one power supply and was extinguished quickly. QNS&L has looked at what other countries are doing, and for example Australia equips their PHP units with fire extinguisher systems in the cabs. However, these systems are chemical and extremely complex to install and maintain.

 CPKC has had no leaks on their high-pressure lines however they have had several thermal events in the last two years. Through their analysis they determined that the thermal events were being caused by wet stacking. Wet stacking is the build up of carbon within the exhaust systems and it's caused through underloading of the main engine. What CPKC found was that when they introduced or swapped that locomotive from a six coach consist to a twelve coach consist it was causing fires. Because its now running at a much higher temperature range and its causing that carbon build up to burn at an accelerated rate causing a thermal event. So, to prevent this CPKC has instituted an enhancement to their maintenance regime where every 90 days they preform a load test on their locomotives which helps burns off the excessive carbon.

6. Next meeting

A Doodle Poll will be sent after this meeting to decide the date for the next meeting sometime in September 2024.

The meeting was adjourned 11:58 AM ET.