

may routinely end a run at the home terminal in the 60th hour. The driver's routine would include assisting in unloading, which is permitted under the existing regulations, and would continue to be allowed under the alternative being adopted today.

The third possibility is the ATA recommendation, which is more complex and requires some explanation. The first part of the proposed "weekly on-duty period" is straightforward. A driver may not be on duty more than 70 hours in any seven consecutive days. This would replace the current 60-in-seven and 70-in-eight restrictions, except that the ATA recommendation refers to duty time and not driving. The industry's interpretation of the 14-hour duty segment could also confuse the construct of a workweek. Use of the flex-time provision should eliminate this confusion. Under the ATA recommendation, the "seven-day period" would end with the beginning of 34 consecutive hours off duty. In other words, once a driver is off duty for a minimum of 34 consecutive hours another seven-day period would begin to run when the driver resumes work.

FMCSA calculates that if each 14-hour block of productive time were extended by an average of 4 hours to compensate for meal periods, rest breaks, and off-duty downtime at shipper facilities, the result would be six 18-hour "workdays" in the seven-day period. This example may be somewhat extreme, but no more so than some of the examples presented in the comments to demonstrate lost productivity.

The second part of the industry's "weekly on-duty period," *i.e.*, the 14-day averaging option, is a little more complicated. The industry petition likened its 140-hours-in-14-days averaging option to the agency's proposed option for two-week averaging. Under the agency's proposal, long-haul drivers could opt to accumulate 72 duty hours in the first week, followed by 48 duty hours in the second week for a weekly average of 60 hours. The purpose of the agency proposal was to enable long haul drivers to use a short weekend while on the road and reserve a longer weekend for the time when they were in their home area. It was not well received for several reasons, particularly because of confusion about the "fixed workweek." Invariably, according to commenters, drivers would be stranded in a remote location and away from their families for their long weekend, a new version of Murphy's Law, apparently.

The industry averaging option would purportedly allow drivers to average 10

duty hours a day over a 14-day period by accumulating up to 84 on-duty hours in the first six days (6 days times 14 hours per day). After 34 consecutive hours off duty, the driver would then be limited to 56 hours on duty during the second seven consecutive days. If he accumulated those 56 hours in the following slightly more than three and a half days, he would have to take a minimum of nearly three full days off before driving again. If Murphy's Law held true, however, those drivers would still inevitably find themselves in a remote location for those three days. And the three days would be mandatory off-duty time, even under the ATA recommendation.

This flexibility could present enforcement problems, as drivers seeking to use the 14-day option could be found in violation of the 70-hours-in-seven-days restriction before they demonstrated compliance with the second week's limitation. Reversing the long and short workweeks could solve the enforcement problem, but it would become too complicated an issue for roadside enforcers. It would also require carrying 14 days worth of logs or using an on-board recording device capable of storing 14 days of duty-time records. Another issue would be the operation of the 34-hour off-duty provision as a restart under the ATA recommendation in the context of the 14-day option. Drivers and carriers could easily be confused after the second period and return to work after a 34-hour break without fully repaying the time owed from the first week.

Acute and cumulative sleep debt arises from sleep deprivation generally, and particularly loss of sleep during nighttime hours. The argument over workweeks places too much reliance on imperfect science. The comments of the ACOEM were particularly instructive in this regard. The ACOEM recognized that fatigue is an important concern for both safety and productivity in commercial driving, but cautioned against placing too much emphasis on what it considers incomplete science. Only the ACOEM recommended deferral of any further action on the proposal until an adequate scientific basis is available.

The agency agrees there is not sufficient scientific or operational justification for a fixed 7-day week. The economic impact of such a "week" on scheduling efficiencies and driver compensation is simply too great, given the uncertain benefits in fatigue reduction.

The agency has concluded that the current 60-hour-in-7-day and 70-hour-in-8-day limitations continue to be

generally acceptable for CMV drivers operating in the United States.

## Weekly Recovery Periods

### General Concept

Having already addressed daily off-duty periods, two related issues are dealt with in this section. They are weekly rest breaks or "weekends" and restart provisions. These concepts are related, but could have entirely different effects depending on how they are implemented. The mandatory weekend recovery period was perhaps the single most criticized element in the proposed rules.

In the NPRM, the agency introduced the concept of a weekly off-duty period or "weekend," which was intended to provide a regularly recurring opportunity to compensate for any accumulated sleep debt. The NPRM noted "the research indicates that to negate the effect of accumulated week-long sleep deprivation and restore alertness to the human body it is necessary to have at least two consecutive nights off duty."

Several commenters correctly pointed out that imposing a regulatory requirement for a weekly off-duty period containing two midnight to 6 a.m. blocks assumes that every driver is subject to weeklong sleep deprivation. The agency may have overreached trying to prevent the most extreme abuses by imposing restraints on the whole driver population. There are numerous examples in the comments and testimony to the effect that most drivers have ample opportunity for normal sleep every night and presumably would never be subject to severe sleep deprivation as a result of their working conditions.

The most frequent objections to the agency's "weekend" proposal, however, were the economic and safety implications of restricting nighttime driving. Comment after comment stated how requiring two consecutive nights off would create havoc on the already overcrowded highways in the daylight hours. The requirement would also, according to numerous commenters, disrupt current and entirely safe business operations and result in much greater replacement costs than forecast in the preliminary regulatory evaluation.

The proposal did not offer any opportunity for a restart of the weekly clock after a certain amount of consecutive off-duty time had accumulated. The agency even proposed to restructure the statutory exceptions in Sec. 345 of the NHS Act, within the proposed weekend recovery period. The