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FD 35087 DEIS Response
EJ&EW and CN and Grand Trunk Company

CN's Forecasting of Volume of cargo to be shipped on the proposed EJ&EW.

"Train Heterogeneity- capacity planning is effected by different trains have substantially different operating characteristics including: speed, acceleration, braking distances, dispatch priorities, height and lengths." (Mark Dingler - 9/12/08 presentation at the U of I "Using the RTC Simulation Model to Evaluate Effects of Operating Heterogeneity on Railway Capacity")

Costs of heterogeneity are significant

- Impacts of freight heterogeneity dependent on level of:
 - Heterogeneity
 - Volume of traffic
 - Priority
- Impact of passenger traffic causes greater impact then corresponding number of freight trains

The Illinois ICC Train Safety section has confirmed that the Metra Star light rail must have a minimum of 25 feet center line to center line separation between tracks to allow concurrent operation with a CN freight train. Has the DEIS determined what impact the DST (double stacked trains will have upon this minimum. A derailment of a DST intermodal car on top of a Metra Star passenger unit may require a greater separation.

The constraints of the 100 foot Right of Way along the EJ&EW will not allow the minimum separation nor will it allow for the consideration of the DST CN trains impact upon the light rail.

Metra Star will provide service to the Lincoln International Airport and O'hare and the typical commuter curfew (temporal) separation will not work with a round the clock commuter service for employees and travelers. Has CN and the STB considered the full impact on the CMAP planning process for the Go to 2040 mega region planning. It appears that CN may be making a commitment to Metra which could never be implemented to gain approval with FD 35087 application.

The EJ&EW Railroad is a new designation which the Grand Trunk Company and the EJ&E Railroad designation will be retained by the U.S. Steel Corporation according to the CN filing. The grandfathered rights one railroad has over another for priority crossing are held by the oldest railroad. Will the STB rule that the grandfathered rights officially have to be retained by U.S.S. and EJ&EW will be designated as the youngest railroad.

The EJ&EW purchase price for the ROW is \$125,000 per acre excluding any compensation for the customer's ongoing revenue, (3) switching yards and other capital equipment. The comparable undeveloped land value and comparable commercial

property value along the route in 2008 dollars is worth multiples above this stated transaction valuation.

Has the STB confirmed that an undisclosed exchange of value agreement (side deal) been entered into between the parties. The past rulings by the Supreme Court made this practice illegal. The ongoing U.S.S. shipments on the CN may be a place to determine if any exchange of value will occur with deeply discounted rates for shipping steel on CN.

The taxing bodies will be disadvantaged by CN ability to announce a lower price of \$300M and thus avoid ongoing real estate taxes.

The letter from CN to Amtrack indicates that the CN trackage in downtown Chicago will be available until the improvements to the Grand Trunk Crossing are usable by Amtrack. Has the STB determined the valuation of the comparable acreage that would become available for abandonment by CN and has the STB made any commitment to CN that they will approve the St. Charles Airlines and CN ROW under the basement of McCormick Place and along the Lake Michigan Lake Front.

The fact that McCormick Place architects have designed for the CN's future abandonment inside their building is an indication of the anticipation that CN could force the STB to approve the FD 37087 transaction based on the three included Purpose and Needs assertions. The fact that McCormick Place without the STB approval would have to continue to honor the CN ROW would block McCormick Place from harvesting this asset. The multiple millions of dollars profits are undisclosed by CN in their application.

The valuation of the Mercy Hospital land is a comparable point of reference for the CN ROW valuation. The trade off of \$125,000 land cost for much more valuable Chicago land allows CN to make a profit solely on a real estate transactional basis.

The CN purpose and needs as stated in FD 37087 do not disclose the nature of the real estate value profit potential as the true reason for their request. The nature of such a windfall profit creation by the action taken by the STB for CN is hidden from the public.

The purchase and approval by the STB of the IC railroad set up this opportunity. The citizens of IL and the USA have paid for the public safety mitigations along the IC (CN) route which according to the CREATE documentation, has 82.5% of the separation and crossing protection investment completed. The CN purpose and need assertion is that this route is unsatisfactory due to a low average speed of their trains.

The public testimony at recent DEIS hearings confirmed that the management of the IC, (see Richard McDonald's Barrington DEIS August testimony) was able move their trains in a superior capacity management than the current CN management. Has the STB DEIS reviewed the historical capacity management and determined that CN

has not chosen to managed their trains to create a 12 hour trip over the same 30 miles of identical trackage. The testimony in brief stated that trains were pre-built for optimum capacity thru Chicago. CN has chosen in contrast not to do this an run more trips via the St. Charles Airline and then sort vs pre-sort. Inefficient CN management is a concern and may be self serving.

CN in the DEIS has stated that their traffic matrix is 10/50/40. Chicago -10%; Memphis -50% and Non USA - 40%.

The CN management has stated in September 2007 that they are cooperating in every possible way to minimize rail congestion in the USA. Therefore, if this CEO statement is valid CN would not be route transcontinental Canadian traffic via Chicago and thru the Windsor tunnel back into Canada. (Harrison to STB Commissioner letter)

The alternative routes for this 40% of the FD 35087 filing must be evaluated since without it the Purpose and Needs are marginalized. If the CEO statement to the STB is honest then logically the cargo is flowing southward from Chicago to the Gulf Ports or via Mexico.

The second fact presented by CN is that 50% of the FD 35087 filing terminates in Memphis, TN at the Pigeon Intermodal Center (PIC). The PIC website states that less than 2% of their operation is for local consumption and that within a radius of 1-2 days via trucking makes up the final destination to end customers or distribution centers in the Southeastern states, Gulf coast states and lower Midwest states.

The third fact presented is only 10% of their FD 35087 forecasted cargo terminates in Chicago.

With the filing of FD 35087 CN asserts that their cargo moves without any seasonality. The linear forecast contradicts CN's own website at www.cn.ca which on their investors tab they report multiple years of real cargo movements broken into 53 - 6 day weeks. CN's week one data reflects 20% of their week thirty three data year over year. Further this seasonal peaking continues for the next 12 weeks. This peaking is consistent with the COSCO vessel tonnage and the Prince Rupert Harbor reporting. The U.S. Commerce data confirms that the consumer goods cargo does present a similar seasonality. The major retailers in the USA websites report their weekly sales and in fact show the fact a seasonality peak occurs every year.

For CN and the STB DEIS to ignore this impact marginalizes the environmental impact on the FD 35087 data.

The use of DST double stacked trains measuring 10,000 to 12,500 feet with 3 power units during this seasonal period marginalizes the environmental impact to the communities along the EJ&EW ROW. The CFO of CN in a RBC webcast stated that they are using gaining improvement financial return from their assets by using these train configurations. They have the ability via a "Fuel Doctor" to activate the third

locomotive for power and braking improvements. Clearly, this information is excluded in the FD 35087 data.

Is the carbon index information correctly stated if CN has omitted 33% of the locomotives from their calculations. Is the carbon index correctly reflected in the DEIS since two formulas have been presented with statistically significant different results. The fact that the Chicago carbon index goal will not be met with the initial formula it appears that CN has changed the calculations to fit an required number vs submitting the initial non conforming number.

The seasonality impacts the dwell time at the railroad crossings and the carbon index is therefore understated.

This CN understated seasonality impacts the train Heterogeneity- capacity planning in the Chicago Mega Region. The Berkley Software Company's RTC simulation software is used by all the freight railroads in the Chicago market including Metra and Amtrack. CN has sponsored R&D at the University of IL Champaign, IL which is available to the STB regarding the impact of heterogeneity.

The belief by CN that they will retain the EJ&E's "Grandfathered" priority rights over all other freight railroad appears to be an item of STB mitigation ruling that is critical to the environmental impact. A STB permanent commuter rail temporal curfew is recommended so that the Metra service will not adversely be impacted by CN.

The geographic constraints of Chicago with Lake Michigan to the East has created a hub and spoke transportation network. With the current Class 2 status of the EJ&E railroad and utilization the heterogeneity capacity calculation are statistically significantly lowered as compared to the simulation of the CN FD37087 linear forecast and the total capacity impact with the marginalized/understated seasonality forecast is not reflected in the carbon index calculations.

The CN management, Mr. Tom Healy, attorney, at the August DEIS hearing in Barrington told a group of four citizens that CN has the right of "re-establishment" of double trackage along the entire EJ&EW ROW since previously two track were in use. This is not consistent with historical information. In Barrington Hills and Lake Zurich records confirm that within these areas double tracks have never been used by the EJ&EW. In reviewing the DEIS CN data regarding planned, improvements including double tracks, the company states that three construction season will be necessary to complete this project.

By using the RTC simulation and taking into account the required constraints during these construction periods and the seasonality impacts it is found that the EJ&EW will be unable to provide the capacity for even CN's understated linear forecast.

Mr. Tom Healy of CN confirmed that during these 3 years CN would exercise it's right to continue to route many of their trains via their Chicago status quo network.

The carbon index calculations presented in the DEIS do not reflect this fact and the relief to the other railroad and residents is therefore delayed. If hypothetically constructions was begun in 2009 the first year of relief would be no earlier than 2013.

If CN has in place a plan for immediately “re-establishing” double tracks along the entire ROW of the EJ&EW it is probable that at least one additional construction season would be used resulting in the first year of relief no earlier than 2014.

By using the RTC simulation tool the projection that the remaining railroads will backfill into the CN released capacity. The carbon index net impact is projected to be significantly smaller impact to the Chicago Regional Carbon Index and negates the purpose and needs of CN's FD 35087 filings.

The current 72 Metra trains that cross daily over the EJ&E railroad in zip code 60010 will increase in 2009 to 84. The cost of fuel has increased the need for more service. If all the Metra lines receive an increase of 16% in new trains has the STB and the DEIS calculated the Heterogeneity capacity impact.

The Metra Star Line capacity planning has apparently not been considered by CN in any of their forecasts.

The RTC simulation tools are available. HDR has licenses to the Berkley Software as does CN. To have this degree of knowledge available to the DEIS and STB is a great resource to look into the probable environmental damage this transaction will produce. For CN to financially sponsor graduate students and professors at the Railroad Institute to master these skills reinforces that CN clearly knows but has used their Parametric Model. If CN were operating in their native country without any other railroad carriers this may have served the Canadian Government's needs. In the FD 35087 filing there are of course multiple variables that CN has full knowledge but has failed to include in their answers from the STB regarding this DEIS.

Why would the STB not use the available tools to discovery if CN data holds up to the intended environmental impacts? It is requested that the STB complete this analysis prior to any judgement on this matter.

CN Parametric Model uses infrastructure and operating parameters to predict a delay-volume curve

– Attributes include

- Average speed
- Speed ratio
- Priority
- Peaking
- Siding spacing and uniformity
- Percent double track
- Signal spacing

RTC (Berkley Software) simulation capacity modeling includes:

Network Inputs:

Track layout

- Sidings
- Turnouts
- Crossovers
- Interlockings
- Switch types
- Signals
- Absolute and permissive

Locomotives

- Type
- Number
- Position in train
- Consists
- Loads
- Empties
- Tons
- Feet
- Special instructions
- Schedules
- Departure
- Arrival
- Protected times

Out Puts Include

Graphical Outputs

- Time-distance graphs
- Timetables
- Train Performance

Calculator (TPC)

- Animations
- Textual Outputs
- Reports for each train
- Detailed delay

Information