

Agenda Date: December 19, 2024  
Item Number: B3

**Docket:** TS- 240930  
Company Name: Arrow Launch Service, Inc. BC-97

Staff: Scott Sevall, Regulatory Services  
Melissa Castaneda-Kerson, Consumer Protection

### **Recommendation**

Issue an Order granting the less than statutory notice and allowing Arrow Launch Services, Inc. to defer the costs to re-power vessels for recovery during a future general rate case and allow a surcharge published in a supplement to take effect January 1, 2025, subject to the following conditions:

- Arrow will file for rates within 6 months of receiving the federal funding for the final boat re-powered.
- Arrow will have to account for project costs, federal funding, and funds received through any approved surcharge.
- The surcharge revenue will be maintained in a sub-account and not co-mingled with other revenue.
- The surcharge for the open construction loan will cover only interest and will be calculated at the average interest due for the year.
- Surcharge amount approved for a finalized loan will be for principle and interest, minus operational savings.
- The principle recovered through the surcharge mechanism will offset the asset cost, when the asset is recovered in general rates.
- The amortization period of the re-power assets is 30 years.
- Arrow shall file a report each year that the surcharge is in place, reporting the amount of revenue received from the surcharge, a listing of which assets were completed, and the most recent 12-months' maintenance and fuel costs.

### **Discussion**

On November 26, 2024, Arrow Launch Services, Inc. (Arrow or Company) filed with the Washington Utilities and Transportation Commission (Commission) a petition requesting permission to defer recovery of assets and for the authorization of a surcharge. The Company serves marine vessels throughout the Puget Sound. The Company's last general rate case became effective in March 2023.

### **History**

Arrow provides launch service to marine vessels throughout the Puget Sound and has a fleet of 13 boats used to provide this service. These vessels range in age with the oldest being built in 1957 and the newest in 2001. The average age of Arrow's boats is 50 years, and all the boats

have original engines.<sup>1</sup> The original engines are Detroit Diesel Series 71 engines. These are 2-stroke, tier zero diesel engines which were manufactured from 1938-1995. Tier zero diesel engines are also known as unrestricted diesel engines as they have no emission controls.

The Environmental Protection Agency has granted money through the Diesel Emissions Reduction Act (DERA), to assist in the replacement of tier zero diesel engines to either tier three or tier four diesel engines. Receiving DERA funding covers 40 percent of the cost to re-power. To qualify for the DERA funding a private company must have an approved sponsor. In this case Arrow has teamed with the American Lung Association which is their approved sponsor.

### **Petition**

Arrow's petition has two requests. The first is for permission to defer recovery of costs associated with the re-power project to a future rate case. The second request is for authorization of a surcharge during the re-power project. The surcharge would have special accounting requirements and would be adjusted as the project progresses or if Arrow files for rates during the project.

The timeline of the surcharge would match the timeline of the re-power project and is expected to last four to five years. Arrow's plan is to re-power three boats per year until their fleet has been completely re-powered.

### **Deferral**

The deferral for recovery is to make sure the assets are adjusted when the assets are added to tariff rates. There is no interest being carried against these assets for ratemaking purposes. The formula below lays out how the assets will be added to the Company asset listing when tariff rates are revised in a future general rate case.

$$\text{Amount to be recovered} = \text{original cost} - \text{federal funding} - \text{principle from surcharge}$$

### **Surcharge**

The surcharge will be adjusted every year when a new line of credit is established and the previous loan is finalized, after receiving federal funds. Additionally, the amount of the surcharge will vary depending on the loan terms, loan amounts, fuel and maintenance cost savings. The surcharge is meant to provide adequate cash flow to service the capital line of credit during the project.

Each year a new construction loan will be used to finance the re-power project for that year. The construction loan will have a varying amount drawn on the loan during the year. The surcharge for this will be estimated at the average interest cost for the year, as during construction no

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<sup>1</sup> The Chief Arrow is the first boat which was re-powered and is currently going through sea trials.

principle is owed, just interest. At the end of the year when the boats are complete, and the federal funding received the loan will be finalized. The finalized loans will use a term of 30 years, matching the expected useful life of the engines. Below is an illustration of the financing of the project.

- Year 1: Open construction loan only interest due to bank.
- Year 2: Open loan interest + payment from finalized loan in year 1.
- Year 3: Open loan interest + payment from finalized loan of years 1 and 2.
- Year 4: Open loan interest + payment from finalized loan of years 1, 2, and 3.
- Year 5: Open loan interest + payment from finalized loan of years 1, 2, 3, and 4.

Six months after the last loan is finalized Arrow must file for rates. This would remove the surcharge, allowing normal rates to recover the assets as shown above in the deferral discussion. Arrow may file for rates during this project, which may adjust the surcharge, but will not remove the requirement to file for rates six months after the last loan is finalized.

Calculating and updating the surcharge will have to happen throughout the project as interest rates will change, as new financing occurs each year. Finalized loans are for the project cost minus federal funds. The basic formula for calculating the surcharge is below.

- Surcharge for open loan = average amount of interest due per month / average monthly operating hours.
- Surcharge for finalized loan (construction cost – federal funds) = (loan monthly payment – fuel savings – maintenance savings) / average monthly operating hours.<sup>2</sup>
- Total surcharge = surcharge for open loan + surcharge for closed loan.

## **Prudency**

This is a large project for a Company this size; however, Commission staff (Staff) believes that this project is prudent as the Company has a unique opportunity to replace its aged and inefficient power units with the aid federal funding which will cover approximately 40 percent of the project cost. This federal funding will be treated as contributions in aid of construction, reducing the asset cost to be recovered through rates. As mentioned previously, the tier zero diesel engines used in the Company's fleet are on average 50 years old and lack the emissions controls and fuel efficiency of modern engines. These engines are no longer in production and will become more expensive to service as time goes on. With the first boat already re-powered, testing is showing that fuel burn has reduced by approximately 20 percent. Also, the Detroit Diesel engines had an 8-year overhaul maintenance schedule. The new John Deere engines have a 15-year overhaul maintenance schedule, reducing operation and maintenance over the life of the engine. Lastly, the emissions from the tier 3 engines are drastically lower than tier 0 as emissions and would decrease by more than 60 percent.<sup>3</sup> Given the average age of the boats and

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<sup>2</sup> For closed loans the fuel and operational savings will reduce the interest before reducing principle.

<sup>3</sup> Tier 0 had no emissions standard; my analysis of 60 percent is from measuring tier 1 to tier 3 emissions reductions.

their original engines are 50 years in culmination with the cost reductions with the project and the operational savings Staff believes this project is prudent.

Previous Commission guidance in Docket UE-110148 and UG-110149 regarding prudence requires the following questions to be considered.<sup>4</sup>

- Has a need been established?  
Yes. The current assets are 50 years old on average and have not been manufactured since 1995.
- Have alternatives been considered?  
Yes. In conversation with Arrow, they had three choices. First, do nothing. Second, look at electrifying the fleet. Third, re-power the current fleet.
- Has there been adequate communication with Company Officers?  
Yes. While Arrow is not a large utility the Company owners and officers are the same people. They are also the same people who evaluated the options and did the work to secure federal funding. Arrow has been in communication with Staff during this process.
- Has there been adequate documentation of these considerations?  
Yes. The Company has provided the documents involved and provided evidence used during the grant application process.

Staff concludes that maintaining the status quo only has increased costs and increased environmental harm in the future. Electric boats are not yet feasible and are more costly as the evidence suggests each boat would be \$10 million or more, with a higher frequency of replacing expensive batteries. The current re-power option before us has 40 percent of the original cost never being recovered in rates, 20 percent fuel savings, about 50 percent savings on overhaul maintenance costs, and a 60+ percent reduction in emissions. Overall, Staff believes this project is beneficial.

### **Conditions**

The conditions Arrow will have regarding this project. For the deferral Arrow will have to account for project costs, federal funding, and funds received through any approved surcharge. This will allow the assets to be placed in service when a general rate case is filed. Six months after the project is finalized, Arrow is required to file a rate case and any rate filing during this project does not remove this requirement.

The surcharge revenue must be accounted for separate from general revenue. The surcharge can be updated throughout the project. The surcharge for the open construction loan will cover only interest and will be calculated at the average interest due for the year. Any surcharge amount approved for a finalized loan will be for principle and interest, minus operational savings.<sup>5</sup> Any principle recovered through the surcharge mechanism will offset the asset cost, just like any federal funding received, when the asset is recovered in general rates. The amortization period of

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<sup>4</sup> *WUTC v. Puget Sound Energy, Inc.*, Dockets UE-110148 and UG-110149 Order 08.

<sup>5</sup> For closed loans the fuel and operational savings will reduce the interest before reducing principle.

the re-power assets is 30 years. Arrow shall file a report each year that the surcharge is in place, reporting the amount of revenue received from the surcharge, a listing of which assets were completed, and the most recent 12-months' maintenance and fuel costs.

### **Customer Comments**

On December 10, 2024, the Company notified its customers of its proposed surcharge to recover costs associated with the fleet repower project. Staff received no comments. If customers have any questions regarding this filing, they can reach Melissa Castaneda-Kerson at [Melissa.castaneda-kerson@utc.wa.gov](mailto:Melissa.castaneda-kerson@utc.wa.gov) or 1-888-333-9882.

### **Conclusion**

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