



The Power Industry's Vision for Continuing Improvement in Fish Protection

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Balance Is Needed

- To minimize “adverse environmental impact” under 316(b) means balancing important interests, including:
 - Protecting the environment
 - Considering costs
 - Ensuring reliable electric power



To Achieve Balance, We Should Use What We Have Learned

- The electric utility industry has done extensive studies of how cooling water intake structures affect aquatic organisms
 - Individual studies under State 316(b) programs
 - Industry-funded research by EPRI
- These studies provide information about fish biology and behavior that can be used to select the best solution for each site



What Have We Learned?

- Past studies show:
 - Power facilities have not posed a significant risk to aquatic populations
 - Protecting fish populations and ecosystems depends on site-specific factors such as the species present at the site, the waterbody type, etc.
 - Protecting fish populations requires understanding of fish biology and behavior and how fish interact with intake structures
- A 316(b) rule based on understanding fish biology and site-specific biological assessments will protect fish populations and ecosystems



The “Best” Solution Considers Environmental Costs and Benefits

- Different cooling water systems and intake technologies have different “adverse” effects
 - Canal dredging and other disruptions
 - Cooling tower impacts:
 - Use of land
 - Increased fuel use/reduced efficiency
 - Increased water consumption
 - Conversely, once-through cooling has benefits, especially where a thermal plume has created a warm water fishery
- Thus, a single uniform solution for every site would not necessarily minimize adverse environmental impact



Conclusions

- A single, one-size-fits-all solution is not always the “best”
- Selecting the best solution requires balancing different interests
- This balancing requires attention to site-specific features
- The best solution is the one that maximizes net benefits

