





ALASKA RESOURCES LIBRARY  
U.S. DEPT. OF INTERIOR

TK

1425

.58

F471

no. 2903

FEDERAL ENERGY REGULATORY COMMISSION

SUSITNA HYDROELECTRIC PROJECT

PROJECT NO. 7114

RESPONSE OF THE

ALASKA POWER AUTHORITY

TO

COMMENTS

ON THE

ALASKA POWER AUTH

FEDERAL ENERGY REGULATORY COMMISSION  
SUSITNA HYDROELECTRIC PROJECT  
PROJECT NO. 7114

RESPONSE OF THE ALASKA POWER AUTHORITY  
TO COMMENTS ON  
APPLICATION FOR LICENSE FOR MAJOR PROJECT

FEBRUARY 15, 1984

TABLE OF CONTENTS

|   | <u>Page/Tab</u> |
|---|-----------------|
| Table of Contents.....  | i               |
| Preface.....  | ii - iii        |
| Subject Index.....  | iv - lxxvii     |
| Bibliography .....  | lxxviii - xc    |
| Alaska Power Authority Response to<br>Comments of the United States Department<br>of the Interior, Office of the Secretary..... | I               |



by corresponding Alaska Power Authority Responses. Some Power Authority Responses contain cross-references to other responses. Cross-referenced Responses to Comments with letter tabs A-H (e.g., A.1, B.10, C.25, etc.) can be found in the Alaska Power Authority's January 19, 1984 filing of Responses to Agency Comments on License Application before the Federal Energy Regulatory Commission. Cross referenced Responses to Comments with letter tab "I" (e.g., I.21, I.55 etc.) can be found in this Comment/Response Document.

Bibliographical references to the "I" series Comment/Responses can be found in this Comment/Response Document following the Subject Index.

## SUBJECT INDEX

This Index classifies Comments and Responses by subject matter. Each Comment/Response combination is listed by an alphanumeric identifying code opposite a subject discussed in the Comment and its accompanying Response. If a Comment/Response deals with more than one subject, it is listed opposite each subject with which it deals.

| <u>Subject</u> | <u>Comment/Response<br/>Code Nos.</u> | <u>Page of Each Agency's<br/>Original Comment Doc-<br/>ument on which Coded<br/>Comment Appears</u> |
|----------------|---------------------------------------|---|
| Access         | A.1                                   | 1   |
|                | A.3                                   | 2   |
|                | A.6                                   | 2   |
|                | A.16                                  | 5   |
|                | A.17                                  | 5   |
|                | A.18                                  | 5   |
|                | A.22                                  | 5   |
|                | B.43                                  | 20  |
|                | C.77                                  | 21  |
|                | F.7                                   | 2   |
|                | F.40                                  | 11  |
|                | I.40                                  | 5   |
|                | I.77                                  | 12-13   |
|                | I.113                                 | 19  |
|                | I.218                                 | 35  |
|                | I.240                                 | 38  |
|                | I.253                                 | 40  |
|                |                                       |   |

| <u>Subject</u> | <u>Comment/Response<br/>Code Nos.</u> | <u>Page of Each Agency's<br/>Original Comment Doc-<br/>ument on which Coded<br/>Comment Appears</u> |
|----------------|---------------------------------------|---|
| Access (cont.) | I.289                                 | 44  |
|                | I.294                                 | 44  |
|                | I.303                                 | 46  |
|                | I.305                                 | 46-47   |
|                | I.308                                 | 47  |
|                | I.312                                 | 48  |
|                | I.344                                 | 56  |
|                | I.353                                 | 57  |
|                | I.363                                 | 58  |
|                | I.364                                 | 58  |
|                | I.378                                 | 60-61   |
|                | I.382                                 | 61  |
|                | I.384                                 | 62  |
|                | I.385                                 | 62  |
|                | I.386                                 | 62  |
|                | I.395                                 | 64  |
|                | I.408                                 | 66  |
|                | I.490                                 | 88  |
|                | I.517                                 | 93  |
|                | I.519                                 | 94  |
|                | I.521                                 | 94  |
|                | I.532                                 | 97  |
|                | I.533                                 | 97  |
|                | I.536                                 | 98  |
|                | I.53                                  |   |

| <u>Subject</u>   | <u>Comment/Response<br/>Code Nos.</u> | <u>Page of Each Agency's<br/>Original Comment Doc-<br/>ument on which Coded<br/>Comment Appears</u> |
|------------------|---------------------------------------|---|
| Access (cont.)   | I.539                                 | 98  |
|                  | I.553                                 | 101   |
|                  | I.554                                 | 101   |
|                  | I.575                                 | 106   |
|                  | I.576                                 | 106   |
| Aesthetic Impact | A.7                                   | 2   |
|                  | A.19                                  | 5   |
|                  | I.538                                 | 98  |
| Air Quality      | C.91                                  | 25  |
|                  | C.92                                  | 25  |
|                  | C.93                                  | 25  |
|                  | C.94                                  | 25-26   |
|                  | I.352                                 | 57  |
| Alternatives     | A.8                                   | 2-3   |
|                  | A.19                                  | 5   |
|                  | A.20                                  | 5   |
|                  | B.61                                  | 25  |
|                  | B.63                                  | 25  |
|                  | B.65                                  | 26  |
|                  | C.1                                   | 1   |
|                  | C.22                                  |   |

| <u>Subject</u>       | <u>Comment/Response<br/>Code Nos.</u> | <u>Page of Each Agency's<br/>Original Comment Doc-<br/>ument on which Coded<br/>Comment Appears</u> |
|----------------------|---------------------------------------|---|
| Alternatives (cont.) | C.24                                  | 7   |
|                      | C.25                                  | 8   |
|                      | C.26                                  | 8   |
|                      | C.27                                  |   |

| <u>Subject</u>       | <u>Comment/Response<br/>Code Nos.</u> | <u>Page of Each Agency's<br/>Original Comment Doc-<br/>ument on which Coded<br/>Comment Appears</u> |
|----------------------|---------------------------------------|---|
| Alternatives (cont.) | I.541                                 | 99  |
|                      | I.542                                 | 99  |
|                      |                                       |   |

| <u>Subject</u>          | <u>Comment/Response<br/>Code Nos.</u> | <u>Page of Each Agency's<br/>Original Comment Doc-<br/>ument on which Coded<br/>Comment Appears</u> |
|-------------------------|---------------------------------------|---|
| Aquatic Impacts (cont.) | B.11                                  | 9   |
|                         | B.13                                  | 9-10  |
|                         | B.19                                  | 11  |
|                         | B.24                                  | 13  |
|                         | B.28                                  | 14  |
|                         | B.37                                  | 18  |
|                         | B.39                                  | 18-19   |
|                         | B.40                                  | 19  |
|                         | B.41                                  | 19  |
|                         | B.44                                  | 20  |
|                         | B.45                                  | 20  |
|                         | B.54                                  | 23  |
|                         | B.55                                  | 23  |
|                         | B.57                                  | 23  |
|                         | B.62                                  | 25  |
|                         | C.35                                  | 10  |
|                         | C.36                                  | 10  |
|                         | C.37                                  | 10  |
|                         | C.39                                  | 11  |
|                         | C.40                                  | 11-12   |
|                         | C.41                                  | 12  |
|                         | C.50                                  | 14  |
|                         | C.51                                  | 14  |
|                         | C.58                                  | 15  |
|                         | C.59                                  | 16  |

| <u>Subject</u>          | <u>Comment/Response<br/>Code Nos.</u> | <u>Page of Each Agency's<br/>Original Comment Doc-<br/>ument on which Coded<br/>Comment Appears</u> |
|-------------------------|---------------------------------------|---|
| Aquatic Impacts (cont.) | C.60                                  | 16  |
|                         | C.63                                  | 17  |
|                         | C.6                                   |   |

| <u>Subject</u>          | <u>Comment/Response<br/>Code Nos.</u> | <u>Page of Each Agency's<br/>Original Comment Doc-<br/>ument on which Coded<br/>Comment Appears</u> |
|-------------------------|---------------------------------------|---|
| Aquatic Impacts (cont.) | I.41                                  | 5   |
|                         | I.49                                  | 6   |
|                         | I.50                                  | 6</   |

| <u>Subject</u>          | <u>Comment/Response<br/>Code Nos.</u> | <u>Page of Each Agency's<br/>Original Comment Doc-<br/>ument on which Coded<br/>Comment Appears</u> |
|-------------------------|---------------------------------------|---|
| Aquatic Impacts (cont.) | I.133                                 | 22  |
|                         | I.134                                 | 22  |
|                         |                                       |   |

| <u>Subject</u>          | <u>Comment/Response<br/>Code Nos.</u> | <u>Page of Each Agency's<br/>Original Comment Doc-<br/>ument on which Coded<br/>Comment Appears</u> |
|-------------------------|---------------------------------------|---|
| Aquatic Impacts (cont.) | I.377                                 | 60  |
|                         | I.391                                 | 63  |
|                         |                                       |   |

| <u>Subject</u> | <u>Comment/Response<br/>Code Nos.</u> | <u>Page of Each Agency's<br/>Original Comment Doc-<br/>ument on which Coded<br/>Comment Appears</u> |
|----------------|---------------------------------------|---|
| Bear (cont.)   | I.163                                 | 27  |
|                | I.164                                 | 27  |
|                |                                       |   |

| <u>Subject</u>              | <u>Comment/Response<br/>Code Nos.</u> | <u>Page of Each Agency's<br/>Original Comment Doc-<br/>ument on which Coded<br/>Comment Appears</u> |
|-----------------------------|---------------------------------------|---|
| Commissioning<br>Facilities | B.12                                  | 9   |
|                             | B.25                                  | 13  |
|                             |                                       |   |

| <u>Subject</u>                                      | <u>Comment/Response<br/>Code Nos.</u> | <u>Page of Each Agency's<br/>Original Comment Doc-<br/>ument on which Coded<br/>Comment Appears</u> |
|---|---------------------------------------|---|
| Construction and<br>Construction Methods<br>(cont.) | I.146                                 | 24  |
|   | I.190                                 | 30  |

| <u>Subject</u>                                      | <u>Comment/Response<br/>Code Nos.</u> | <u>Page of Each Agency's<br/>Original Comment Doc-<br/>ument on which Coded<br/>Comment Appears</u> |
|---|---------------------------------------|---|
| Construction and<br>Construction Methods<br>(cont.) | I.375                                 | 60  |
|   | I.378                                 | 60-61   |
|   |                                       |   |

| <u>Subject</u>                           | <u>Comment/Response<br/>Code Nos.</u> |  |
|--|---------------------------------------|--|
| Construction and<br>Construction Methods |                                       |  |

| <u>Subject</u>                        | <u>Comment/Response<br/>Code Nos.</u> | <u>Page of Each Agency's<br/>Original Comment Doc-<br/>ument on which Coded<br/>Comment Appears</u> |
|---------------------------------------|---------------------------------------|---|
| Coordination with<br>Agencies (cont.) | I.147                                 | 24  |
|                                       | I.185                                 | 30  |

| <u>Subject</u>                        | <u>Comment/Response<br/>Code Nos.</u> | <u>Page of Each Agency's<br/>Original Comment Doc-<br/>ument on which Coded<br/>Comment Appears</u> |
|---------------------------------------|---------------------------------------|---|
| Coordination with<br>Agencies (cont.) | I.537                                 | 98  |
| Costs (Economic)                      | A.                                    |   |

| <u>Subject</u> | <u>Comment/Response<br/>Code Nos.</u> | <u>Page of Each Agency's<br/>Original Comment Doc-<br/>ument on which Coded<br/>Comment Appears</u> |
|----------------|---------------------------------------|---|
| Energy Demand  | B.65                                  | 26  |
|                | C.2                                   | 1   |
|                |                                       |   |

| <u>Subject</u>    | <u>Comment/Response<br/>Code Nos.</u> | <u>Page of Each Agency's<br/>Original Comment Doc-<br/>ument on which Coded<br/>Comment Appears</u> |
|-------------------|---------------------------------------|---|
| Fisheries (cont.) | C.69                                  | 19  |
|                   | C.70                                  | 19  |

| <u>Subject</u>    | <u>Comment/Response<br/>Code Nos.</u> | <u>Page of Each Agency's<br/>Original Comment Doc-<br/>ument on which Coded<br/>Comment Appears</u> |
|-------------------|---------------------------------------|---|
| Fisheries (cont.) | F.24                                  | 8   |
|                   | F.26                                  | 8   |
|                   | F.27                                  | 8   |

ALASKA RESOURCES LIBRARY  
U.S. DEPT. OF INTERIOR

Page of Each Agency's  
Original Comment Doc-  
ument on which Coded  
Comment Appears

| <u></u> |
|---------|
|---------|

| <u>Subject</u>    | <u>Comment/Response<br/>Code Nos.</u> | <u>Page of Each Agency's<br/>Original Comment Doc-<br/>ument on which Coded<br/>Comment Appears</u> |
|-------------------|---------------------------------------|---|
| Fisheries (cont.) | I.504                                 | 91  |
|                   | I.505                                 | 91  |
|                   |                                       |   |

| <u>Subject</u>       | <u>Comment/Response<br/>Code Nos.</u> | <u>Page of Each Agency's<br/>Original Comment Doc-<br/>ument on which Coded<br/>Comment Appears</u> |
|----------------------|---------------------------------------|---|
| Flow Regimes (cont.) | C.70                                  | 19  |
|                      | C.71                                  | 19  |
| </                   |                                       |   |

| <u>Subject</u>       | <u>Comment/Response<br/>Code Nos.</u> | <u>Page of Each Agency's<br/>Original Comment Doc-<br/>ument on which Coded<br/>Comment Appears</u> |
|----------------------|---------------------------------------|---|
| Flow Regimes (cont.) | I.131                                 | 21  |
|                      | I.133                                 | 22  |
|                      |                                       |   |

| <u>Subject</u> | <u>Comment/Response<br/>Code Nos.</u> | <u>Page of Each Agency's<br/>Original Comment Doc-<br/>ument on which Coded<br/>Comment Appears</u> |
|----------------|---------------------------------------|---|
| Game           | F.59                                  | 16-17   |
|                | F.62                                  | 17  |
|                |                                       |   |

| <u>Subject</u>                 | <u>Comment/Response<br/>Code Nos.</u> | <u>Page of Each Agency's<br/>Original Comment Doc-<br/>ument on which Coded<br/>Comment Appears</u> |
|--------------------------------|---------------------------------------|---|
| Gas Supersaturation<br>(cont.) | I.60                                  | 8   |
|                                | I.67                                  |   |

| <u>Subject</u>              | <u>Comment/Response<br/>Code Nos.</u> | <u>Page of Each Agency's<br/>Original Comment Doc-<br/>ument on which Coded<br/>Comment Appears</u> |
|-----------------------------|---------------------------------------|---|
| General Comments<br>(cont.) | F.73                                  | 19  |
|                             | H.1</                                 |   |

| <u>Subject</u> | <u>Comment/Response<br/>Code Nos.</u> | <u>Page of Each Agency's<br/>Original Comment Doc-<br/>ument on which Coded<br/>Comment Appears</u> |
|----------------|---------------------------------------|---|
| Hunting        | I.513                                 | 92-93   |
| Hydrology      | B.14                                  | 10  |

| <u>Subject</u>    | <u>Comment/Response<br/>Code Nos.</u> | <u>Page of Each Agency's<br/>Original Comment Doc-<br/>ument on which Coded<br/>Comment Appears</u> |
|-------------------|---------------------------------------|---|
| Hydrology (cont.) | I.42                                  | 5   |
|                   | I.44                                  | 6</   |

| <u>Subject</u> | <u>Comment/Response<br/>Code Nos.</u> | <u>Page of Each Agency's<br/>Original Comment Doc-<br/>ument on which Coded<br/>Comment Appears</u> |
|----------------|---------------------------------------|---|
| Ice (cont.)    | I.40                                  | 5   |
|                | I.48                                  | 6   |

| <u>Subject</u>     | <u>Comment/Response<br/>Code Nos.</u> | <u>Page of Each Agency's<br/>Original Comment Doc-<br/>ument on which Coded<br/>Comment Appears</u> |
|--------------------|---------------------------------------|---|
| License Conditions | I.3                                   | 1(a)  |
|                    | I.128</                               |   |

| <u>Subject</u>  | <u>Comment/Response<br/>Code Nos.</u> | <u>Page of Each Agency's<br/>Original Comment Doc-<br/>ument on which Coded<br/>Comment Appears</u> |
|---|---------------------------------------|---|
| Mitigation, Mitigation<br>Measures and<br>Mitigation Plans<br>(cont.) | B.48                                  | 21  |
|   | B.                                    |   |

| <u>Subject</u>  | <u>Comment/Response<br/>Code Nos.</u> | <u>Page of Each Agency's<br/>Original Comment Doc-<br/>ument on which Coded<br/>Comment Appears</u> |
|---|---------------------------------------|---|
| Mitigation, Mitigation<br>Measures and<br>Mitigation Plans<br>(cont.) |                                       |   |
|   | F.1                                   |   |

| <u>Subject</u>  | <u>Comment/Response<br/>Code Nos.</u> | <u>Page of Each Agency's<br/>Original Comment Doc-<br/>ument on which Coded<br/>Comment Appears</u> |
|---|---------------------------------------|---|
| Mitigation, Mitigation<br>Measures and<br>Mitigation Plans<br>(cont.) | I.15                                  | 1   |
|   | I.45                                  |   |



































| <u>Subject</u>         | <u>Comment/Response<br/>Code Nos.</u> | <u>Page of Each Agency's<br/>Original Comment Doc-<br/>ument on which Coded<br/>Comment Appears</u> |
|------------------------|---------------------------------------|---|
| Socioeconomics (cont.) | F.55                                  | 15  |
|                        | F.56                                  | 16  |
|                        | F.57                                  | 16  |
|                        |                                       |   |











































| <u>Subject</u>      | <u>Comment/Response<br/>Code Nos.</u> | <u>Page of Each Agency's<br/>Original Comment Doc-<br/>ument on which Coded<br/>Comment Appears</u> |
|---------------------|---------------------------------------|---|
| Worst Case Analysis | A.10                                  | 3   |
|                     | B.5                                   | 3-4   |
|                     |                                       |   |

















































































































































































































































































































































































































































































































































































































