

Cleco Power LLC

Affected System Impact Study for Transmission Request

Request 2007-AG2-ASF7

The purpose of this study is to examine the affected system request for the 2007-AG2-ASF7 Aggregate Facility Study on transfer capability across Cleco Power LLC's (Cleco) Transmission System. This study will determine the ability to accommodate request 2007-AG2-ASF7 for 267 MW of Long Term Firm Point-To-Point Transmission Service. This request contains multiple transactions; the first two begin on June 1, 2008 and extends to June 1, 2013 and are for a total of 167 MW from WFEC to CSWS, the third transaction begins on January 1, 2009 and extends to January 1, 2010 for 100 MW from CSWS to CSWS.

This study was performed using the SPP Aggregate Facility Study models supplied by SPP and identified in the table below. The studies were run using Siemens[®] PSS/e version 30 and MUST version 8.3 programs. Power flow models were developed to reflect anticipated operational conditions, including load, generation, extended outages and confirmed firm transactions, from June 1, 2008 through June 1, 2013. Additionally, the SPP 2009 and 2013 Summer Peak Base Case Models were used for this study to confirm the validity of the results. Capitalized terms used herein shall have the meaning specified in the Definitions section of the OATT or the body of this document.

No modifications to the SPP supplied Aggregate Facility Study base cases or transfer cases were made. Changes to the SPP 2009 and 2013 Summer Peak Base Case Models to create transfer cases include the following:

1. A New plant and machine bus (520922 SLEEPING) were added to the case and electrically connected to bus 520920, FTSUPLY4 for the new 15 MW transaction from Sleeping Bear (WFEC) to CSWS.
2. Generation at bus 521103, BLUCAN14 increased 152 MW for the 152 MW transaction from Blue Canyon (WFEC) to CSWS.
3. Generation at bus 511938, OECSTM1 increased 100 MW for the 100 MW transaction from Oneta (CSWS) to CSWS (2009 Summer peak model only)
4. A new inter-area transaction from WFEC to CSWS for 167 MW was added to the base case.
5. Generation in CSWS balancing authority reduced by 267 MW to provide the sink for the proposed transaction.

If the flow on a monitored facility exceeds 100% of its emergency rating under normal and single contingency conditions with the transfer in place, the loading on the facility will be compared with the loading prior to the transfer. If the transfer causes an increase in flow greater than 3.0%, the facility is expected to require improvement.

Furthermore, if the transfer results in transmission bus voltage levels falling below criteria under single contingency conditions, then voltage support facility additions must be constructed.

With confirmed transactions, the ATC analysis indicates that the transaction is limited by the following facilities with an impact greater than 3.0%. These limiting elements must be upgraded to eliminate the transfer constraints they cause.

Study Results

SPP identified the Clarence to Montgomery 230 kV transmission line to be in violation of criteria for the loss of the Dolet Hills Generating station using the 2009 Summer Peak Aggregate Facility Study model. While Cleco concurs that the Clarence to Montgomery 230 kV transmission line is overloaded during the simulation, Cleco does not see a 3% incremental increase in loading. Therefore, Cleco feels the Clarence to Montgomery 230 kV transmission line is not a valid limiting element for the transactions identified in this study.

Upgrade Cost Estimates

Upgrade cost estimates are planning estimates for transmission facilities owned by Cleco.

There are no upgrade costs associated with this request.

| Limiting Elements | Planning Estimate for Upgrade | Year Needed |
|-------------------|-------------------------------|-------------|
| None | | |

Summary of System Impact Study Results:

| OASIS Request | Period | Cases Used | Capacity (MW) | ATC Available |
|---------------|----------------------------|--|---------------|---------------|
| 2007-AG2-AFS7 | June 1, 2008- Jan 1, 2010 | 2009 Summer Peak Group 1 Scenario 2 Group 1 Scenario 4 Group 3 Scenario 4 Group 4 Scenario 4 | 267 | Yes |
| 2007-AG2-AFS7 | Jan 1, 2010 – June 1, 2013 | 2013 Summer Peak | 167 | Yes |

The requested transfer capability is available for the transactions specified in the study as stated below,

| | | |
|------------------------|----------------------------------|---------------|
| Request 2007-AG2-ASF7: | June 1, 2008 through Jan 1, 2010 | <u>267 MW</u> |
| | | Total: 267 MW |

| | | |
|------------------------|----------------------------------|---------------|
| Request 2007-AG2-ASF7: | Jan 1, 2010 through June 1, 2013 | <u>167 MW</u> |
| | | Total: 167 MW |

These results are based upon the most recent information available at the time of the study. TTC and ATC values obtained in the study are for Cleco's Transmission System and are subject to change as a result of any modifications to the assumptions utilized in the study.