

# Action Request Response

To: Public Service Commission  
Ric Campbell, Chair  
Connie White, Commissioner  
Ted Boyer, Commissioner

From: Division of Public Utilities  
Lowell Alt, Director  
Judith Johnson, Energy Section Manager  
Artie Powell, Utility Economist

Date: July 30, 2003

Subject: Docket 03-035-14,  
In the Matter of the Application of PacifiCorp for  
Approval of an **IRP-based Avoided Cost Methodology**  
for QF Projects Larger than One Megawatt.

## Issue and Recommendations

On or about May 30, 2003 PacifiCorp filed an application seeking approval of an IRP-based avoided cost (“AC”) methodology for qualifying facilities (“QFs”) greater than one megawatt. In addition to reviewing the application, the Division of Public Utilities (“Division”) has participated in discussions with PacifiCorp and other interested parties leading to this filing. While the filing, in general, is consistent with the comments and suggestions of the QF work group, there are a few remaining unresolved issues. In particular, it is not clear how capacity payments are to be calculated or when such payments are to be utilized and applied to various QF proposals. Therefore, based on the Division’s involvement in the QF work group and its review of

the application, the Division recommends that the proposed AC methodology be approved on an interim basis only. Furthermore, the Division recommends that the Commission order the QF work group to meet as soon as possible to establish a schedule to work toward resolution of any remaining issues including the criteria determining when capacity payments are appropriate and how such capacity payments are to be calculated and possibly allocated among several QF projects.

## B a c k g r o u n d   a n d   D i s c u s s i o n

On October 7, 2002 PacifiCorp filed a proposed tariff (Advice filing 02-12, Schedule 38, Qualifying Facility Procedures; Docket 02-035-T11) for QFs greater than one megawatt. The Division filed comments on October 31, 2002 (along with other parties) recommending approval of the schedule but noted several unresolved issues. The Commission (November 12, 2002) suspended the Tariff and ordered interested parties (“QF work group”) to submit additional comments to PacifiCorp by November 29, 2002 and for PacifiCorp to file responses with the Commission by December 13, 2002.

On December 13, 2002, taking into account party’s comments, PacifiCorp filed a revision of Schedule 38. In response to a Commission Action Request, the Division filed comments (January 17, 2002) recommending the adoption of the revised tariff. Again, however, the Division noted that several issues still remained unresolved. Specifically, Schedule 38 does not fully specify the method to be used by PacifiCorp in valuing a proposed QF project.

On February 24, 2003 the Commission issued an order approving Schedule 38 as revised in PacifiCorp’s December 13, 2002 filing. The Commission further ordered PacifiCorp to file, within 90 days of the order, an avoided cost method. In compliance with the Commission’s order, on May 30, 2003 PacifiCorp filed an IRP-based AC methodology for approval.

The QF work group met several times over the intervening months (February through May) to discuss issues specifically dealing with the AC methodology. Comments, both oral and written, from members of the work group were submitted to PacifiCorp for its consideration. The AC methodology is, in general, consistent with party's comments.

The purpose of valuing a QF, that is, calculating PacifiCorp's avoided costs associated with a proposed QF, is to establish a set of indicative prices that PacifiCorp would be willing to pay to the QF for providing power over the life of a purchase power agreement. As discussed by the QF work group, the methodology proposed by PacifiCorp is based on running its IRP model first without the QF project in the resource mix and second with the QF as part of the resource mix. The first run of the IRP model, the base case, establishes PacifiCorp's total costs. The second run establishes PacifiCorp's costs with the QF. The difference, on a net present value basis, is the costs avoided by PacifiCorp by inclusion of the QF. The avoided costs can then be shaped in a number of ways to provide indicative prices to the QF. Of course the avoided costs, and thus the indicative prices, will vary depending on the assumptions used in the IRP model and the characteristics of the QF project. Under the terms of Schedule 38, the QF provides its operating and other characteristics to PacifiCorp to facilitate the IRP runs. A new base case will be established as subsequent IRPs and resulting action plans are updated.

As previously mentioned, this methodology is, at least in general, consistent with discussions held in the QF work group. However, the proposed methodology does not make it clear when an energy payment or a capacity payment or both will be applicable. In response to data requests, PacifiCorp has indicated that unless the QF is greater than 100 MW, no displacement takes place. That is, the QF is not large enough for PacifiCorp to forego either buying power from a third party or building needed generating facilities. And thus, the QF would not be eligible to receive a capacity payment. Furthermore,

PacifiCorp indicates that the choice of displacement is a discretionary input into the IRP modeling.

In an example provided by PacifiCorp to members of the QF work group, PacifiCorp calculates a capacity payment by simply discounting the installed cost of a 100 MW combustion turbine (“CT”). Some members of the QF work group have recently suggested that this approach is not appropriate and that a portion of the costs should be grossed-up for taxes before calculating a capacity payment.

While it may be reasonable to assume that only a QF of sufficient size is likely to displace a PacifiCorp resource, its not clear that QFs smaller than 100 MWs (or any other proposed threshold) do not provide some capacity value to PacifiCorp. It may be, for example, that a QF of say 50 MWs allows PacifiCorp the option of postponing building a facility for a number of years. It seems reasonable therefore, that the smaller QF should receive a prorated capacity payment based on the number of years that PacifiCorp is able to defer building a generating facility.

Similarly, it is not clear how or if groups of QF projects will be treated with regards to capacity payments. For example suppose, given 100 MWs is the appropriate threshold for displacement, three separate QF projects add to a total of 85 MW. If a fourth QF project pushes the total capacity over 100 MW, should the fourth project get the total capacity payment or should the capacity payment be prorated between the four projects? Should any of the four QF projects receive a capacity payment?

The Division believes that this is a particularly important issue because of the potential for co-generation projects to help manage growth. Peak demand along the Wasatch Front is expected to continue growing at an above average rate and twice as fast as base load growth. Such growth puts pressure on the power supply system as well as on transmission and distribution. It is our understanding that there is the potential for several co-generation projects along

the Wasatch Front smaller than 100 MW. Such development could be valuable in managing peak demand. The Division believes that it is important to design this avoided cost methodology in such a way to remove barriers to projects that would otherwise bring value to the system.

These issues surrounding capacity payments have not been thoroughly discussed by the QF work group. Therefore, the Division recommends that the Commission approve the proposed IRP-based avoided cost methodology on an interim basis only and instruct the QF work group to meet as soon as possible and determine a schedule to work toward resolution of these, and any other, outstanding issues.

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